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For December, 1935

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Just in Passing—

AS early as 1712 the city council of Philadelphia passed a minute recognizing the fact that since the poor of the community were increasing daily some haven of refuge should be provided for them at public expense. It was not, however, until 1732 that the first public workhouse was constructed and from it has grown a great city hospital housing today more than two thousand patients — the Philadelphia General. The institution as it appeared in 1767 appears as our cover design this month.

ONE of the curious developments of American culture is the degree to which we have identified our holidays with gustatory pleasures. The Fourth of July can hardly be thought of except in connection with a picnic and what would Thanksgiving be without turkey, cranberry sauce and mince and pumpkin pie? Even Christmas, the most deeply significant of the holidays in Christian countries, has its own distinctive foods. The cynic might rail at such a perversion of hallow days, but the philosopher will acknowledge that those who have the true spirit of the occasion will not lose it when faced with the traditional food and those who lack the spirit may imbibe some of it with the time honored bill of fare.

CERTAINLY there can be no harm in making special efforts in the hospital kitchen to create a spirit of cheer and hope among those who, for one reason or another, must be away from their

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family hearths at Christmas. In the dietary department for this month will be found two articles containing ideas that will be helpful in planning your Christmas celebration. One is from a Northern hospital and the other from a well known institution in the Old Dominion.

WHILE on the subject of Christmas, let's not forget about the tuberculosis Christmas seals, at least for our personal mail. While no one would be brash enough to give all the credit for the decline in the tuberculosis death rate to the activities of the National Tuberculosis Association, it is nevertheless an interesting fact that since the inception of the seal sale in 1906 the tuberculosis death rate in the United States has fallen from almost 200 to 55.6 per 100,000 people. The funds raised by the seals are used for clinical research on tuberculosis, for the rehabilitation of arrested cases of the disease, for the distribution of health literature, for tuberculin testing and chest x-ray work among school children and adult contacts and for the promotion of general health programs in homes, industries and schools. One result of the research work financed by the N. T. A. is to be a more exact use of chest roentgenography. A discussion of this research is presented in the current issue (page 51).

THE impact upon our social institutions of the new philosophy of government that has grown up in the United States in the last half decade is a serious threat to the highest development of these agencies, according to Dr. Glenn Frank, president of the University of Wisconsin. In the leading article in our January issue he declares that "this obviously throws the shadow of a great threat across the future of all the privately financed and independently operated social enterprises of American life." Coming from the president of a state supported university, this article is challenging and arresting.

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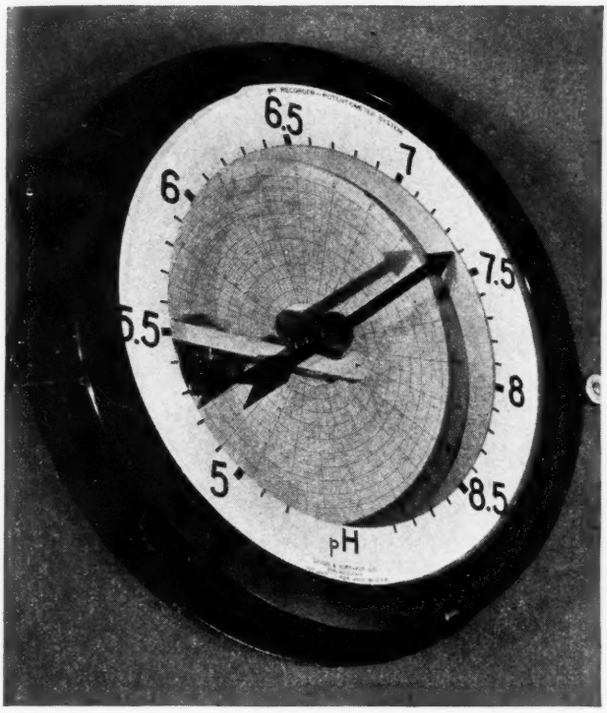

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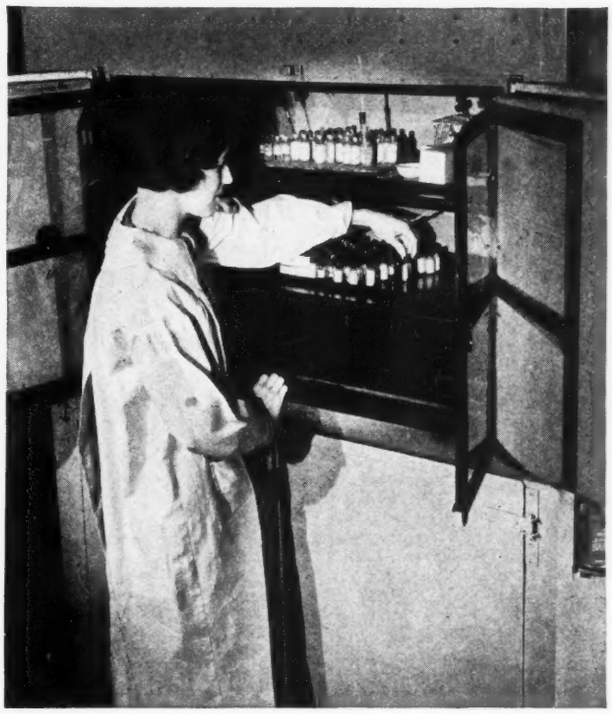

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IN keeping with our habit, a special feature is planned next month for the small hospital—this time an article on the nursing difficulties encountered and how some of them can be met. Edna H. Nelson, now of Chicago but until recently of Ottawa, Ill., is the very competent author.

THE second article in the series for mental hospitals will appear next month from the gifted pen of Dr. George H. Stevenson. It deals with the clinical facilities of the modern mental institution.

CAN city hospitals enlist the support of active and intelligent women to act as volunteers? They seem to think so in Cleveland. Next month the head of the volunteer service in the Cleveland City Hospital will tell what has been done there and how.

JUST for good measure next month's issue will contain a down-to-the-earth article on saving money in the surgery, prepared by one of the country's noted surgeons. Dr. Willard Bartlett of St. Louis draws on many years of acute observation to help you cut operating room costs.

FLASHES FROM THIS ISSUE:

"Admittedly one of the most important duties of the administration is the selection of employees." *Page 44.*

"We have found that colorful wheel chairs . . . can be employed to great advantage within the hospital." *Page 46.*

"The body temperature of the premature infant can be controlled much more adequately in rooms in which the temperature, humidity and ventilation rate are properly regulated than in rooms in which these physical factors are allowed to fluctuate." *Page 86.*

"The hospital in common with all other enterprises is living in an age of 'gadgetry.'" *Page 45.*

"The superintendent who closely scans his monthly expenditure sheet is likely to be surprised by the amount of money necessary for the purchase of glucose solution." *Page 79.*

"Walls and ceilings can be cleaned by washing much more cheaply than by repainting." *Page 88.*

THE MODERN HOSPITAL

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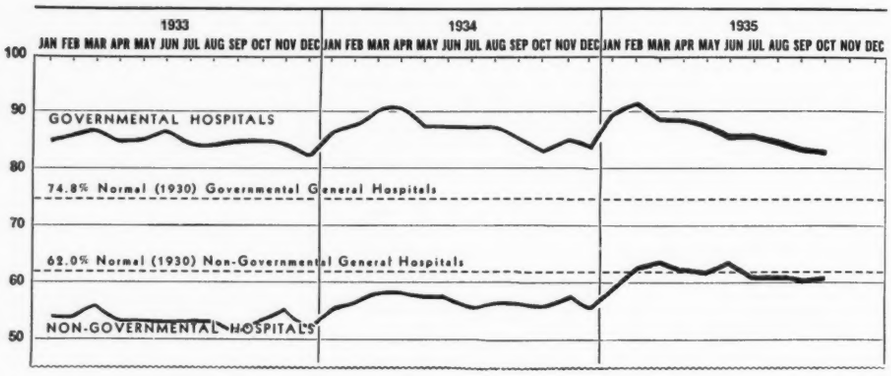


Preliminary occupancy figures for October showed a slight rise from September in the nongovernmental general hospitals reporting each month. The October average is 3.2 points above the corresponding figure for 1934. As pointed out editorially in this issue, each month of 1935 has shown a higher occupancy than the corresponding month of the previous year.

In the governmental general hospitals the decline that began in March continues unchecked. While the decline is gradual in character, it is steady.

A total of eighteen hospital building projects were reported from October 25 to November 25, inclusive. Of these sixteen reported costs aggregating $2,212,000. Of those reporting costs one was a $25,000 alteration, two were new hospitals costing $112,000 and thirteen were additions to hospitals costing $2,074,500. There were two other additions for which no cost figures were available. This is a considerably smaller amount of building than was reported last month when the total was over $9,500,000.

The total of new hospital building projects reported with costs during the first eleven months of the current year is practically equal to the amount reported for all of 1934 and exceeds the total for 1933. The figures are as follows: 1933, $31,598,355; 1934, $39,037,830, and 1935 (eleven months), $38,919,070.

The general improvement in business activity, noted during the past four months, continued through October and the first half of November, according to the regular monthly survey of the National Industrial Conference Board. More than seasonal increases were made during October, compared with September, in motor vehicle production, machine tool orders, building and engineering contract awards, electric power output, bituminous coal production, textile activity, and rail shipments. Less than seasonal advances were reported for steel production and retail trade. Data for October show that business is in a better position than it was a year ago, the board declares.

The wholesale price index of the *New York Journal of Commerce* advanced slightly from 81.5 on October 26 to 82.2 on November 16. Grain prices continued to decline, the index going from 89.9 to 86.2, but general food prices advanced nevertheless from 83.6 to 85.5. Textiles advanced rather rapidly and fuel slightly, the movements being from 66.9 to 69.2 and from 79.5 to 80.0 respectively. Building materials again dropped slightly. The price index for drugs and fine chemicals, as published by the *Oil, Paint and Drug Reporter*, remained practically unchanged, staying at 190.4 from October 28 to November 18 and then dropping to 190.0. (For the latter index 100 is taken as August 1, 1914; for the others it is 1927 to 1929 average.)

Occupancy Figures of Hospitals in Various States and Cities

Type and Place	Census Data on Reporting Hospitals[1]		1934			1935									
	Hospitals	Beds[2]	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.
Nongovernmental															
New York City[3]	68	15,194	66.0	68.0	66.0	70.0	72.0	74.0	70.0	75.0	75.0*	75.0*	75.0*	75.0*	75.0*
New Jersey	58	9,772	60.0	61.0	58.0	62.0	65.0	66.0	65.0	66.0	64.0	62.0	60.0	60.0*	60.0*
Washington, D. C.	9	1,782	65.4	65.3	61.8	72.0	71.8	70.5	69.8	68.7	70.6	68.2	62.0	63.9	63.9*
N. and S. Carolina	102	5,950	61.1	60.9	56.8	60.6	63.1	64.9	62.3	64.6	66.8	65.7	66.3	65.7	64.4
New Orleans	7	1,210	49.5	47.7	44.9	47.7	49.5	50.1	46.8	50.9	58.3	57.1	58.2	55.1	53.3
San Francisco	16	3,081	64.2	63.2	62.0	65.5	68.2	67.4	69.5	66.4	67.4	62.4	63.9	63.9	66.5
St. Paul	7	988	39.1	45.8	45.8	41.5	53.6	55.9	52.3	48.8	51.7	46.4	49.1	48.5	46.6
Chicago	25	6,372	56.9	57.9	54.5	57.4	57.3	61.9	58.8	55.9	54.7	54.5	53.8	53.6	54.7
Cleveland	7	1,237	57.8	57.7	56.5	61.9	62.0	62.0	63.6	65.7	63.4	63.2	63.4	58.5	64.4
Total[4]	299	45,586	57.7	58.6	56.3	59.8	62.5	63.6	62.1	62.4	63.5*	61.7*	61.3*	60.7*	60.9*
Governmental															
New York City	17	12,317	89.4	91.0	92.9	96.7	100.6	103.2	104.6	105.6	100.4	103.6	93.2	91.7	85.8
New Jersey	6	2,122	83.0	81.0	78.0	86.0	86.0	84.0	85.0	84.0	77.0	79.0	79.0	79.0*	79.0*
Washington, D. C.	2	1,316	78.1	84.8	77.6	86.6	95.5	76.3	72.7	69.4	67.4	68.4	69.5	62.9	62.9*
N. and S. Carolina	13	1,256	67.0	68.3	64.7	65.4	65.7	68.5	65.8	68.6	68.1	68.7	72.3	68.0	67.4
New Orleans	2	2,227	129.3	131.6	130.5	144.9	145.4	130.4	130.8	132.8	138.8	149.0	143.1	140.9	138.5
San Francisco	3	2,255	72.7	78.1	74.2	77.4	79.1	77.1	80.3	77.3	72.3	72.0	71.3	79.5	77.6
St. Paul	1	1,050	66.8	68.5	68.8	74.4	78.7	77.8	75.8	75.2	74.5	67.3	63.4	61.5	65.0
Chicago	2	3,880	84.8	87.0	84.7	89.0	83.4	93.9	84.2	86.0	84.5	83.5	80.5	80.4	81.7
Total[4]	46	26,423	83.9	86.3	83.9	90.1	91.8	88.9	88.7	87.4	85.4	86.4	84.0	83.1*	82.3*

[1]Insofar as possible hospitals for tuberculous and mental patients are excluded as well as hospital departments of jails and other institutions. The census data are for the most recent month. [2]Including bassinets, in most instances. [3]Includes only general hospitals. [4]The occupancy totals are unweighted averages. These averages are used in the chart above. *Preliminary report.

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Construction, Equipment, Administration and Maintenance of Hospitals and Sanatoriums

VOLUME 45 DECEMBER, 1935 NUMBER 6

Government and Voluntary Hospitals—Can We Justify a Double Standard?

By JOSEPH C. DOANE, M.D.

Editor, THE MODERN HOSPITAL

WHEN one endeavors to compare either the administrative organization or the end results of government and voluntary hospitals, he immediately rediscovers what has been long known to be a fact, that no yardstick exists which accurately measures the adequacy of the institutional care of the sick.

What are the basic standards for government hospitals and how and why do these differ from standards for voluntary hospitals? Are there economic, medical or ethical considerations which determine that a service is suitable and satisfactory to one class of patient while to another class the same type of care is definitely inadequate? In other words, is there one grade of hospital service that is proper for the pauper in government hospitals while another standard exists for ward patients in the voluntary hospital or for private patients in church, fraternal or proprietary institutions? If the answer to this last question is in the affirmative, are there any sound reasons to justify such a double standard of service?

Usually it is the politician, sometimes it is the physician and perhaps less often it is the social worker who complacently remarks that life in shabby, unkempt wards or in dormitories with verminous beds and unsavory food is far easier than that represented by the surroundings from which such patients come. Who can justify this attitude? Should government hospitals be less efficient, less sanitary, of lower reputation and held in a place of less respect in the estimation of the community

Is there one grade of hospital service that is proper for the patient in government hospitals while another and higher standard is required for ward patients in the voluntary hospital? In this article the hospital field is challenged to disprove or to justify the existence of a double standard

than the voluntary or other nonprofit institutions? Should such institutions be less efficiently conducted and less safe for the economically underprivileged than the smaller, nongovernment community institution?

Many are willing to concede that the mere size of federal, state, city or county institutions makes for inefficiency, and that efforts to administer such institutions in too large units usually prove futile from the standpoint of efficiency, economy and good patient care. Others believe that too little money is available from tax sources and that per-capitas in government hospitals are so low that only custodial service plus the minimum of medical care can be given to this group of the country's sick.

To make the discussion concrete, let us glance at the size of the load carried by government institutions. In the most recent hospital number of the *Journal of the American Medical Association* (March 30, 1935), it is stated that there are 1,749 government hospitals in the United States. In these institutions are 717,888 beds, or an average of 410 beds in each hospital. These institutions in 1934 admitted 2,159,065 patients. There was an average census of 645,000 patients under treatment each day.

The size of these individual institutions is to be contrasted with the 4,585 hospitals comprising the remainder of the field. In the latter group the average size of each institution is 72 beds. Therefore 27.5 per cent of all the hospitals in the United States are government institutions and they contain 65.5 per cent of the total number of beds. This group, of course, includes federal, state, county, city and city-county institutions.

Volume of Work Is Increasing

Moreover, the amount of work performed by government hospitals during the last half decade has certainly not decreased. As the people become less able to meet the expense of care in the voluntary hospital, the volume of service demanded of the government institution grew. An evidence of this fact is that the number of children born in government hospitals has increased from 83,000 in 1929 to 144,000 in 1934. These few statistics have been cited to indicate the immense volume of service required of hospitals supported by some division of government — federal, state, county and city.

What are the essential similarities and differences in these institutions? Mere bulk differentiates the average government institution from the voluntary hospital. But the pathology of disease remains the same in either type of institution. Chronic heart and kidney disease, cirrhotic changes of the liver and blood vessels, the course of infection and of the degenerative changes incident to age are identical whether the patient is in a 1,000-bed institution or in one of 50 beds. The same equipment is necessary in each. If malignancy is improved by x-ray treatment in the case of a private room occupant in a voluntary hospital such a therapeutic measure is necessary in handling the same type of case in a large city or county hospital. The raw material handled by each hospital is the same. Moreover, many of the administrative problems of the executive of the small hospital continue to trouble the administrator of a federal or state institution.

A Challenge

The purpose of this article is to challenge the hospital field to disprove that a double standard of service does rather generally exist, and to call upon those who support such a standard to justify the existence of low scientific zeal in the medical care of patients in many city and county institutions. Specifically, attention is directed to a number of queries that have direct bearing on this matter.

1. Does the type of control of government hospitals now commonly observed mitigate against the efficient care of patients?

The usual set-up of the government hospital provides for an appointive or elective officer who is directly responsible to those who have chosen him for the proper conduct of a larger or smaller institution supported by taxpayers. His term of office is likely to be concurrent with and dependent upon the duration of the influence of the political party in power. He may not be responsible, and usually is not, to a continuing board of trustees.

Politics may enter and, when this is so, the merit system suffers. It is difficult for the administrator of such a hospital to remain disinterested in the political fortunes of his superior. If the executive is a physician he is likely to have as his immediate superior within the institution a practical politician whose duty it is to control the institutional patronage. Is the patient as safe in such an institution as in a community nongovernment hospital?

2. How do the accounting practices in such an institution compare with those observed in a voluntary hospital? Are the system of accounts and vouchers, the collection from other government subdivisions for the board of patients and the restriction of free service to the economically deserving as efficiently carried out in a large government hospital as in a smaller voluntary one? Can purchasing be performed honestly and expeditiously? Is the battle for the delivery of honest

goods always won? How can the petty grafter be discovered and eliminated? Does this obnoxious individual more often ply his trade in city or county hospitals than in other institutions? In short, does the dollar of the taxpayer merit and receive the same careful handling as is given that of the contributor to the voluntary hospital?

3. How effective is civil service in securing only the most highly trained and efficient personnel for government hospitals? What are the methods usually employed by the politician to evade civil service regulations, and how may the executive of a large state, city or county hospital protect himself against the demands of the unfit for jobs? Is the training and morale of the average private hospital worker of a higher grade than that observed in the type of institution under discussion? Do dishonest civil service commissioners often furnish the examination questions in advance to those whom they desire to favor? Should interns, social workers, nurses, anesthetists, staff members and others be exempted from civil service because of the existence of unusual training and equipment or should the government hospital executive not expect such consideration in the selection of his staff?

The Problem of Admissions

4. What are the specific problems that confront the admitting office of the government institution? Politicians sometimes insist upon the free treatment of their friends. Special nursing without charge or a private room when the medical condition does not require it are practices not unknown in government hospitals.

The problem of originating a just and fair plan for governing admissions from other hospitals in the community is far from easy. Is the city or county hospital director justified in refusing the admission of patients until their economic and resident status is investigated?

What are the elements of good credit making in the governmental hospital? Where should this bureau be placed in the hospital set-up? Is it fair to have a law such as exists in New York State making false statements relative to the patient's ability to pay a criminal offense? Should such investigations originate in a central office at the local government administrative building or should they emanate from the hospital? What should be done with non-residents who apply for care in the tax-supported institution?

5. Are there any differences in the schools of nursing in these two general types of institutions? Should nurses in government institutions be less well housed, less efficiently instructed, less carefully selected, of lower moral, ethical or educational standards than those in the private hospital? How can enough nurses be procured? It is a notorious fact that many government hospitals are understaffed from a nursing standpoint. Can this be corrected? Is it a fact that inefficient nurses are sometimes placed and continued in service because of political friendships?

What Is the Dietitian's Rôle?

6. The dietary department of government hospitals is of immense proportions. What should be the dietitian's place in the institutional organization? Should she be subordinate to a steward? How may the stealing of food and supplies be curtailed? Is petty larceny more likely to occur than in other types of hospitals?

A dietitian of large experience recently remarked that of all the hospitals in which she had served, the government institution was the one in which the employees seemed to possess the lowest sense of property responsibility. In the public hospital, she stated, chefs, waiters and even doctors and nurses were inclined to purloin valuables while in other institutions such acts were of rare occurrence. Is this intimation just or unjust?

7. Should the government hospital be willing to exist without the confidence and understanding of the public, and if not how can this contact be brought about? In every political campaign weird stories of institutional mismanagement are likely to originate and the community is all too ready to believe them. What of the service of women's advisory boards? What part may the superintendent play in acquainting the community with the hospital's ability and desire to render a high type of service to its clientele? How many superintendents are now building their public relations on a sound basis?

8. Should the scientific and investigative work of government hospitals be inferior to that of the voluntary institution? How far is such a hospital justified in employing taxpayers' money in learning about the cause and cure of disease? What is the proper set-up of the laboratory department? How may the scientific zeal of the hospital staff be maintained? Is it more difficult to secure autopsies in the city or county than in the smaller voluntary hospital? Should a community be satisfied with custodial care for its psychopathic patients while no attempt is being made to prevent mental illness?

How should the staff of government institutions be organized and how can such a group of physicians most efficiently function in the care of the great number and variety of patients committed to their care?

9. Is it proper for the purely indigent, the men-

tally ill, the physically ill and even the criminal to be housed under the same roof or in the same group of buildings? What service may the government hospital render to other city, county or state departments?

10. What are the specialty services that the government hospital should offer? Can any valid excuse be given for the absence of physical therapy, occupational therapy, an adequate x-ray and clinical laboratory, electrocardiography and a well conducted and carefully organized out-patient service?

11. Some contend that the government hospital represents the economic millstone around the neck of voluntary institutions and private physicians. Perhaps the charge is unjust but it is repeated sufficiently often to merit investigation. How can abuses of its service be prevented? Should the city or county hospital treat semiprivate or private patients? Should private hospitals be reimbursed from tax funds for the care of indigent patients? A delineation of all the relationships, therefore, between government and nongovernment institutions is of high importance.

Some contend that the local government hospital should handle the whole free load. Others endeavor to share the care of the indigent on a percentage basis with voluntary hospitals. In fine, what is the place of the public hospital in the community's scheme of hospitalization?

12. Can the same high grade of social service be rendered in this type of institution as in the voluntary one?

13. How can and should the American Hospital Association and other national organizations serve the executives of government hospitals? Should it be the function of such organizations to frown sternly upon the injection of politics in the care of the sick? Should these organizations refuse to recognize a government hospital that persistently violates professional codes? Should such organizations come to the assistance of high grade, well trained hospital executives who are oppressed by political bunglers?

Comment Is Sought

Many questions have been asked but few have been answered. This has been intentional in order to develop comment on and further elaboration of each subject mentioned. If for any reason a stigma is attached to the conduct of state, city and county hospitals, it is high time that the truth be recognized and the remedy sought. If respectable but economically unfortunate persons are justified in their unwillingness to patronize such institutions, the cause for this attitude should be brought forth. If such hospitals are suitable only for the degraded pauper then such a state of affairs should be plainly made known to the community. If, on the other hand, the foregoing questions can all be answered in the negative, then the splendid work performed by many government hospitals should not be stigmatized by the failings of the few.

It is hoped that some of the distinguished and experienced administrators in the field will endeavor to discuss these topics in the columns of this magazine and answer the challenge given.

What Does a Dietitian Do?

What are the major duties of the dietitian? According to an article in the thirteenth edition of The HOSPITAL YEARBOOK they are as follows:

1. The chief dietitian shall be directly responsible to the superintendent for the proper administration of the dietary department.
2. She shall hire all employees in the department.
3. With the help of the assistant dietitian, she shall keep a time record of all employees.
4. She shall assign definite duties to all employees, and, with the help of the assistant dietitian, shall hold employees responsible for the same.
5. She shall plan the division of labor among employees.
6. She shall requisition all food supplies and shall keep an accurate and detailed record of all new material and supplies.
7. She shall keep a skilled check on and exercise care of all foodstuffs from the time when requisitions are delivered until consumed or otherwise dealt with.
8. She shall ensure a continuous and close inspection of waste, not only in the garbage cans but on return of trays from wards, in order to determine that requisitions are reasonably accurate.
9. She shall approve all menus.
10. She shall inspect the kitchens and storerooms of the department daily.
11. She shall supervise the work of assistant dietitians and student dietitians.
12. She shall be responsible for budgets and estimates.
13. She shall ensure that special diets, whether for therapeutic or ordinary nutrient value, as ordered by a doctor, are carried out in full detail.
14. She shall compute and demonstrate the preparation of diets to out-patients.
15. She shall hold weekly out-patient food clinics.
16. She shall confer with doctors when necessary in special cases when food is of paramount importance.
17. She shall pay special regard to the needs of each patient with some margin of choice based on the patient's tastes and physical condition at the time.
18. She shall be responsible for the educational work of the department, teaching dietetics.
19. She shall make such reports to the superintendent as he may desire.

Simplifying Admitting Records

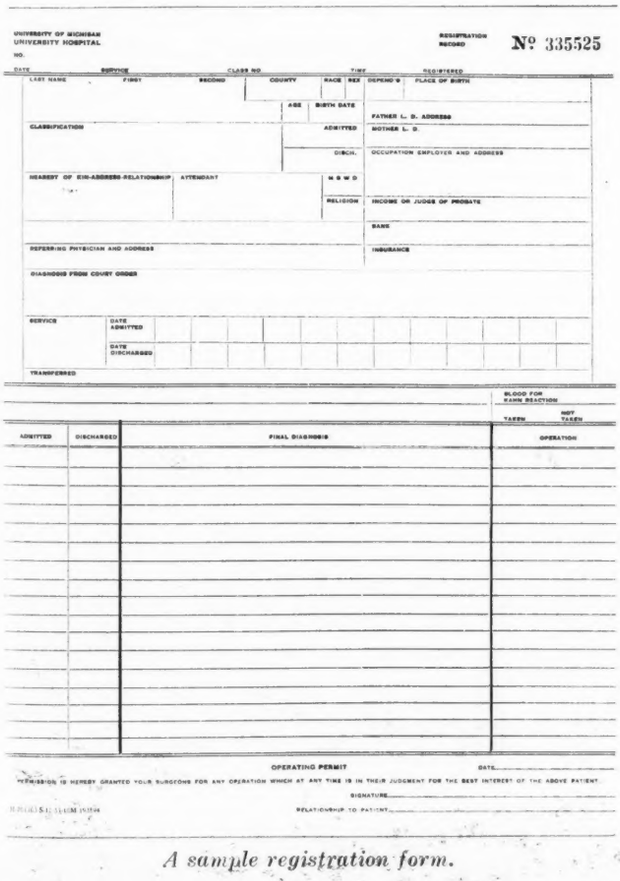
By G. P. BUGBEE
Office Manager, University Hospital, Ann Arbor, Mich.

RECENT changes in the admitting department at University Hospital, Ann Arbor, Mich., have reduced clerical work.

The out-patient department is housed in the same building with the major portion of the in-patient units. All patients coming for admission are first registered in the out-patient department. On the basis of examination there the patient's admission is authorized by the professional staff.

The out-patient registration form measures 8½ by 11 inches, the upper half of which is completed in the registration department. Until recently this upper portion was prepared with a number of carbon copies. The original 8½ by 11 sheet became the first sheet of the medical record. The carbon copies were distributed as follows: one for the business office numerical file, one for the alphabetical registration office file, one for the record room and one for the social service department. In addition to these copies prepared in one typing, various other forms were prepared by separate typing operations.

If the patient was admitted to the hospital, admitting blanks were prepared on 3 by 5-inch forms. Two of these forms were retained in the admitting department files, one arranged alphabetically and one arranged by bed location. A third copy was sent to the chief of the particular service to which the patient was assigned. Two more copies were sent to the ward, one as a bed card and one for a file of patients in the nursing station. Two copies were sent to the social service department. One copy was sent to the information desk and one copy became a notification to the business office for preparation of a ledger sheet.


UNIVERSITY OF MICHIGAN
UNIVERSITY HOSPITAL

REGISTRATION RECORD

Nº 335525

NO.

DATE | SERVICE | CLASS NO | TIME REGISTERED

LAST NAME | FIRST | RECORD | COUNTY | RACE | SEX | DEPEND'T | PLACE OF BIRTH

AGE | BIRTH DATE

FATHER L. D. ADDRESS

CLASSIFICATION | ADMITTED

MOTHER L. D.

DISCH.

OCCUPATION EMPLOYER AND ADDRESS

NEAREST OF KIN-ADDRESS-RELATIONSHIP | ATTENDANT

M S W D

RELIGION

INCOME OR JUDGE OF PROBATE

BANK

REFERRING PHYSICIAN AND ADDRESS

INSURANCE

DIAGNOSIS FROM COURT ORDER

SERVICE | DATE ADMITTED | DATE DISCHARGED

TRANSFERRED

BLOOD FOR KAHN REACTION: TAKEN | NOT TAKEN

ADMITTED | DISCHARGED | FINAL DIAGNOSIS | OPERATION

OPERATING PERMIT

DATE

PERMISSION IS HEREBY GRANTED YOUR SURGEONS FOR ANY OPERATION WHICH AT ANY TIME IS IN THEIR JUDGMENT FOR THE BEST INTEREST OF THE ABOVE PATIENT.

SIGNATURE

RELATIONSHIP TO PATIENT

A sample registration form.

In addition to this information, various other forms were prepared in the admitting department for various classes of patients.

Recently it was decided that a gelatin duplicating machine with the refinements now available would expedite or eliminate much of this work. The new routine is somewhat as follows: The large 8½ by 11 face sheet of the medical record is prepared in the registration department for duplication purposes by preparing a carbon copy with special carbon paper on a form printed with special printer's ink. The special carbon paper and printer's ink meet the particular needs of our installation; however, the manufacturers also have available special typewriter ribbon, colored ink and colored pencils that can be used with the gelatin machine.

The registration form was redrawn. As in the past, it gives all information recorded in the registration department. Information later duplicated on the admitting slip is concentrated in the 3 by 5 area in the upper lefthand corner. Information put on a smaller registration card is confined in a smaller area in the same location. The process to be successful requires the redrawing of forms, special though inexpensive paper stock and some planning. However, once the master form is redrawn all other forms can be rapidly reproduced as recorded on the master form. Thus the registration form becomes the master copy for preparing all complete copies of that form, as well as the patient's registration card, the admission blanks and many other forms.

Christmas Comes to the Hospital

Children's Memorial Hospital, Chicago.

ALWAYS there are persons who cannot be home for Christmas, but the young probationer and the young patient, away from home for the first time, probably face the day with more dread than anyone else.

It is for these young people that hospitals have, year after year, made home seem a little less distant by placing Christmas trees in the nurses' home, the dining room, the wards and the entrance hall, by hanging gay wreaths at windows, and producing Santa Clauses at auspicious moments.

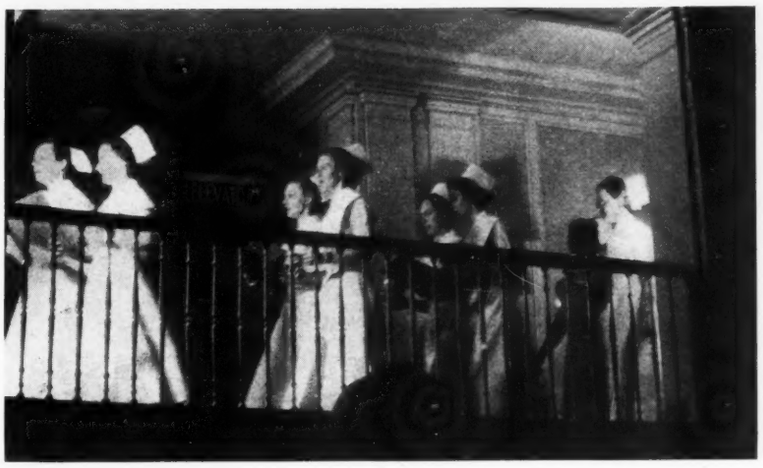
The probationer finds herself a part of Christmas from the time the morning carols are sung. The breakfast trays she carries are holly decked, in a little while the children will be given their party and later the nurses

will hold theirs. Christmas, for a probationer, is too full to permit her to be homesick.

The young patients at Children's Memorial Hospital, Chicago, look forward to Christmas with much anticipation. As early as November they are planning their letters to Santa Claus who never fails to appear with a stocking for each letter writer and an overflow of gifts too large for any stocking, in answer to the children's requests.

The children's party is held on the day before Christmas, which is open house day for members of the board and their friends. It is on the morning of this day that carols are sung by the nurses in a candle light ceremony. Christmas Day at this hospital is quiet and set apart mostly by the Christmas dinner and the afternoon visits of parents of ward patients.

Children's Memorial Hospital, Chicago.



During the caroling ceremonies at Reading Hospital, Reading, Pa., the nurses carry hymnals and these add to the picturesqueness of this annual occasion.

Snow turned the grounds and houses of Muhlenberg Hospital, Plainfield, N. J., into a real Christmas card for us.

Innkeeping in the Hospital

By A. J. HOCKETT, M.D.
Superintendent, Touro Infirmary, New Orleans

THE value of a hotel atmosphere as applied to the care of the sick can scarcely be overestimated. Deliberate effort to approach and even to surpass in a hospital the usual conception of hotel service inevitably results in surprising dividends in the form of word-of-mouth advertising, newspaper publicity and increased occupancy. It is a rather sad commentary on hospitals that improvements of this nature are so unusual as to be considered almost sensational news.

In the final analysis the success or failure of such a program hinges upon personnel morale and loyalty; the idea must become an actual state of mind before any degree of success can be attained. Over a period of years, Touro Infirmary, New Orleans, has attempted to promote a plan of this kind. While compromises to tradition have occasionally been necessary, progress has been made and serves as a foundation for continued development. Foresight, energy, and time are necessary before any scheme can be worked out in all departments. Equipment cannot be scrapped overnight and habits of years' standing cannot be changed at the waving of a wand. The significant details involve both personnel and equipment.

Admittedly one of the most important duties of the administration is the selection of employees. The choice of individuals who are to come into direct and intimate association with patients, their friends and relatives, should be based upon the personality, habits and demeanor of the applicants. Details of education and appearance can often be sacrificed for spontaneous courtesy and a pleasing smile. A quiet manner

and an abundance of tact should be considered essential traits of lobby employees. The personality of every hospital is an abstract but definite entity determined by its front office personnel. Compromises in this connection do not show on profit and loss statements but are heavy burdens in terms of patronage and good will.

During the past five years, collection of hospital bills in advance has been a universal procedure. Time and again, the necessity for privacy in making financial arrangements has been emphasized. Too often, these transactions are carried on within full view of bystanders to the discomfiture of the patient and his family. Resentment on the part of the patient and his physician can often be avoided by a simple rearrangement of waiting room facilities to ensure privacy.

As a matter of everyday routine, hotel managers arrange housekeeping services to suit the convenience of their guests. Unfortunately, the familiar and tempting "Do Not Disturb" placard of the hotel is hardly applicable in a hospital. Nevertheless, housekeeping, as it pertains to private room service, should be tactfully and intelligently managed. A modicum of thought and personal attention, a casual inquiry or even the more formal written questionnaire should replace the arbitrary routine so often practiced. Doctor Smith's 9 a.m. rounds might well take precedence over the usual sweeping and dusting procedures under full swing at that time. Mrs. Jones' 7:30 a.m. "basal" appointment should be posted for the information of the housekeeper as well as for the nursing supervisor. Her room should be in order upon her return.

The hospital in common with all other enterprises is living in an age of "gadgetry." The high pressure salesmanship involved and the increasing responsibilities of the executive head have left many of us unwilling to accept even the most worth while advances in the matter of equipment. The most satisfactory criterion by which to judge claims and counterclaims is largely their importance from the hotel service point of view. A short discussion of a few of the more recent innovations of proved worth might be of interest.

Upon entering a modern hotel suite the visitor usually experiences a pleasant sensation of quiet luxury

Touro's coffee shop is a convenience for visitors, patients and personnel.

and seclusion. This is primarily due to the acoustical effect of the heavy pile carpeting and draperies so commonly employed which absorb sound. Modern ideas of asepsis hardly allow for the wholesale transfer of this plan to the hospital. It has been aptly stated that terrazzo floors and gleaming walls do not allow a germ to thrive in the sick room "not even a germ of comfort." More recently, this problem has been solved to a large degree. The application of any soundproofing material to ceilings in corridors, in lobbies and in rooms results in exactly the same psychologic effect with no apologies to sanitation. It is true that expense is yet a major factor but the project once undertaken can be completed over a period of years, if necessary, with no great outlay of capital funds. The elimination of noise by this method is often as high as 70 per cent and the result may be almost startling.

A dissertation on technical principles involved in air conditioning is hardly pertinent. Nevertheless a few thoughts might be of interest. Mark Twain once remarked "everyone talks about the weather but nobody does anything about it." The hotel of tomorrow, however, will offer a guar-

-Picayune
Good Morning!
THIS PAPER IS YOURS WITH OUR COMPLIMENTS
WE HOPE YOU WILL BE COMFORTABLE WHILE YOU ARE IN OUR CARE, AND WE SHALL BE GLAD TO RECEIVE ANY SUGGESTIONS FOR AN IMPROVEMENT IN OUR SERVICE.
TOURO INFIRMARY
AY, SEPTEMBER 26, 1935
tages Annual Parade in St. Louis
SPLIT ON ACCEPTING OLD REGULAR PLANS
SHERMAN TO FACE ESTHER MAGILL IN TRIAL FOR MURDER
Factory Girl Will Take Stand Against Former Suitor Today
Gubernatorial Candidate Willing But Conservation Commissioner Balks Over Organization's Demands
GROUP WILL CONFER WITH ALLEN, JUDGE
Ward Chiefs Want Proposals Put Into Effect by Special Session Before Primary in January

The daily newspaper with a "Good Morning" sticker attached is delivered to private patients with the hospital's compliments and finds ready welcome.

anteed year-round climate. It is generally conceded that the modern hospital must do likewise. Expense is again a major factor and rapid developments have caused many to hesitate. Once begun, piecemeal planning and individual installations can be easily expanded as funds become available.

Special problems as they apply to hospitals and patients should be carefully studied. Thermostatic controls will provide flexibility and comfort according to individual idiosyncrasies. Fresh air fiends and the "human icicle" are too commonly encountered to lead us into false hopes for a common denominator of temperature and humidity which will suit the whims of everyone. The elimination of dust, noise, odors and drafts is of real importance and will result in complete relaxation, deep sleep and a decrease in the period of hospital care. These factors have been often exploited as advertising slogans by the more forward looking hotels for many years. The publicity resulting from improvements of this kind is often gratifying and meets the squeamish requirements of ethics in hospital propaganda.

In passing, it is of interest to note the difference of opinion which exists as to the advisability of special charges for air conditioned accommodations. While an additional charge is the common practice both in hotels and hospitals, it is doubtful whether it is justified. After all, we do not set up special charges for heating. Is not the basic principle identical? Are we not placing ourselves in an indefensible position and tempting criticism rather than commendation?

Shops Prove an Asset

Realizing the hue and cry of unfair competition which always follows in the wake of expansion toward a fuller service along retail trade lines, I nevertheless predict a continued development of shops in connection with hospitals. The superservice idea is as necessary for hospitals as for other lines of business in which it has long since become established. Diminishing revenues, decreased endowments and increased efficiency in management point the way to a more complete service and increased operating income. Flower shops, barber shops, restaurants and drug stores will become as matter of fact as operating suites and special diet kitchens. The added convenience to visitors, patients and personnel alone justifies the trend even though pressing financial problems were not an even more important circumstance. It is entirely possible that business income and profits will replace, to a large extent, decreasing government and philanthropic subsidies.

It should hardly be necessary to note that smart, well kept uniforms can impart to employees an air of efficiency that is as pleasing to sick patients as to hotel guests. Basically, this is not a matter of expense but purely one of psychology. The effect of the white shirts and black bow ties worn by the entire orderly staff at least approximates the effect of the brass buttons and square caps of the more elaborate corps. The motif should be noticeable from the ambulance entrance to the kitchen. The common fault is a change in uniform from year to year resulting in a motley appearance and having a bad effect upon morale.

The smartly uniformed doorman, front desk boy and elevator corps will often pay larger dividends than an additional nursing supervisor whose importance, though greater, is not so readily appreciated by the patient.

Colorful Wheel Chairs Please

We have found that colorful wheel chairs recently used at the Chicago Century of Progress can be employed to great advantage within the hospital. These chairs cost considerably less than the usual type of hospital equipment which they replace and arouse favorable comments.

The unsightly open elevators so often seen in hospitals can be closed in at a moderate expense and the general appearance of the institution greatly improved.

We supply to all patients in private room accommodations morning newspapers with an attached sticker mentioning the fact that the paper is delivered with the compliments of the hospital. The cost has been found to be nominal and appreciation has been often expressed.

The "comment card" has come into rather general use. It may be modified to the needs of each institution and is a satisfactory method of indirect advertising which adds to the patient's personal interest in the hospital.

The dietary department can assist in the hotel program by emphasizing individual service according to the likes and dislikes of each patient. All patients are seen by the dietitian immediately upon their entrance and consulted in regard to their diets. A considerable degree of flexibility should be allowed. A centralized, bus boy tray service direct from main kitchen to private room is a minor luxury which we feel justifies the cost.

The use of color has been found to be of great value in removing the stigma of hospital fear. Spreads, draperies, shower curtains, mats, chair covers and furniture have been blended individually for each room. The result has been found pleasing to the eye and restful to the nerves. The expense is not excessive if incorporated in the normal program of replacements.

We May Even Run Short of Nurses

Hospitals in most sections of the United States and Canada have not experienced any shortage of graduate nurses but some administrators foresee such a shortage as a result of the closing of small or low quality schools, the eight-hour day and the lengthening of the curriculum

IS THERE now a shortage of graduate nurses to meet the needs of hospitals in the United States and Canada? Several times recently hospital executives have stated that they have encountered such a shortage or feared that it was imminent.

To gain a representative cross section of hospital opinion on the question The MODERN HOSPITAL queried its thirty-seven state correspondents in the United States and seven in Canada. While they are all busy people and therefore could not be expected to make detailed statistical studies, their opinions are based on actual hospital experience. All of them are hospital executives; nearly all are administrators.

The correspondents were not asked to express an opinion on the future supply of nurses. So many factors enter into a consideration of supply and demand in this as in other professions and so many of these factors are not subject to accurate measurement and prediction that it seemed unwise to "count noses" on such a matter.

The questions included in the questionnaire, together with the replies received to each were as follows:

1. Are there sufficient nurses in your community to meet the demands for special duty in hospitals?

Twenty-seven replies were in the affirmative; one (Minnesota) in the negative. Two qualified their replies, one (Iowa) stating that an adequate supply was available "most of the time"; and another (New York) "except in busy times." The correspondent in Washington, D. C., concluded from the fact that there were only a few registered nurses on the local relief rolls that the demand being made for their services is being barely met.

2. Are there sufficient nurses available in your community to meet the demands for general floor service?

Twenty-one replies were in the affirmative; nine in the negative. These latter were from the following states: Michigan, Ohio, Iowa, Minnesota, Connecticut, California, Colorado, Kentucky and New York. The reply from New York stated that it is occasionally necessary to get out-of-town nurses. Maryland reported that there was some difficulty in securing acceptable nurses during vacation periods.

3. Are there sufficient nurses available in your community to meet the demands for specialized types of nursing (maternity, psychiatric, surgical, pediatric, public health, home nursing)?

One correspondent did not reply. Fifteen replied in the affirmative, and fifteen in the negative. These latter commented as follows:

Ohio — "Some specialties lacking."
Iowa — "Not for teaching and administrative positions."
New York — "Do not have all types mentioned."
Maine — "There are few nurses who have special training in psychiatry. Other types adequate."
Rhode Island — "We have little call for specialized nursing."
Connecticut — "Except psychiatry."
Washington — "Adequate for general duty under supervision. Not for supervisors in psychiatry or pediatrics."
California — "No."
Colorado — "Yes, except psychiatric."
Kentucky — "No."
Tennessee — "Short in psychiatric and public health nurses."
Virginia — "No, that is, with proper training."
Washington, D. C. — "No. Scarcity in nurses especially trained in psychiatry, pediatrics and public health work."
Georgia — "No."
Manitoba — "Not sufficient fully trained psychiatric or public health nurses."

4. What remuneration are hospitals offering for the nurses they wish to employ?

The replies to this question can be classified only in a general way, as some correspondents

answered it in terms of their own hospitals only. Some gave a range of salary for all types of nurses, while others specified definite salaries for supervisors and floor duty nurses. Most answers specified what maintenance was included.

In a general way the salaries for floor duty or general duty nurses ranged from a minimum of $20 in Saskatchewan to a maximum of $80 in Connecticut.

Salaries for supervisors ranged from a minimum of $60 plus maintenance in North Carolina and Connecticut to a maximum of $150 plus maintenance in Maine.

Regional Variation Is Noted

The variation by region was rather marked. The five answers from Canada (all presumably for general floor duty nurses) showed a range from $20 to $70 a month with $50 as the figure most frequently quoted. New England and the Middle Atlantic states apparently pay the highest rates, judging by the reports. The range is from $50 to $80 for general duty and $60 to $150 for supervisors. The South Atlantic states reported a range from $25 to $60 for floor duty nurses and from $60 to $100 for supervisors. In Indiana, Michigan, Wisconsin and Ohio the range for floor duty nurses is $50 to $75 with three of these four states reporting a minimum of $58 or higher. The West North Central group of states gave a range from $45 to $85. In the South Central section (reports were received from Kentucky, Tennessee, Arkansas, Oklahoma and Texas) a minimum of $40 was reported by two states, $50 by a third and $60 by the other two. Only one report was received from the Mountain states. It indicated that in Colorado most hospitals pay $50 or $55 but in Denver nurses receive $75 or more. In Washington the rates are $50 to $75 and in California $70 to $80. A sum should be added to cover the value of maintenance.

5. Are all available and competent nurses on the registries?

Twenty replies were in the affirmative. Eleven were negative. The New York correspondent qualified his answer by stating that nurses who were married and did not need the extra money were not registered; the Maine correspondent stated: "There are competent nurses, married, who are not on the 'registry,' but who are registered and will work occasionally by request." Tennessee reported that 80 per cent of its nurses were on registries.

6. Do the hospitals employ only graduates of certain schools or will they take any able nurses?

Eight replies to this question were to the effect that hospitals will take any able nurses. Fifteen stated that hospitals preferred their own graduates; one preferred graduates of university schools. Two will take nurses from "certain schools" only. One takes its own graduates for floor duty, but for private duty will take any qualified nurses. Another will take any nurse for private duty acceptable to the patient. Three preferred local state graduates, and one accepted nurses from hospitals with a daily average of not less than 100 patients.

The Ohio correspondent stated that at a series of district meetings of the Ohio Hospital Association reports were received from communities in the districts indicating a shortage of nurses, particularly for general duty. It was the opinion in the meetings that at least two factors, in addition to the usual ones, contributed to the shortage: (1) the discontinuance of small schools of nursing and the reduction in classes in larger hospitals; (2) the adoption of eight-hour duty by hospitals and more recently by special duty nurses.

In Toledo, Ohio, the shortage was so pronounced that a resolution was passed requesting the association to appoint a committee to study ways and means of supplementing the graduate nurse. A committee was accordingly appointed to study particularly the use of ward maids.

Virginia Reports Schools Closing

Virginia reported that there have been several schools of nursing closed during the past two years and if the new curriculum which is now being studied by the National League of Nursing Education is to be adopted, it is probable that a number of other schools will also have to close.

The Massachusetts correspondent states that he has been informed by the registrar of the Central Directory of Nurses in Boston that "the calls for the current year were in excess by 6,300 of the calls in 1934. On the other hand, there is an increase of memberships in the directory from 456 in 1934 to 523 in 1935."

The Tennessee correspondent feels that there is an oversupply of graduate nurses, but not an oversupply of good nurses. "It seems to me," he states, "that in this day and time, and due somewhat to the depression, nurses have an idea that when they receive their diplomas, all is ended and that it is not necessary to open another textbook or take up postgraduate work." He insists that his supervisors take postgraduate courses.

The correspondent from Manitoba calls attention to the fact that hospitals are apparently using only floor duty nurses of their own schools. His own hospital (a children's institution) is endeavoring to arrange an interchange of floor duty nurses with the general hospitals.

Are Blood Transfusions Worth While?

By WILLIAM B. TALBOT, M.D.
Formerly Assistant Director, Grasslands Hospital, Valhalla, N. Y.

ADMINISTRATORS of hospitals almost invariably cooperate with their medical staffs in arranging for blood transfusions for indigent patients. It is safe to say, however, that many administrators when called upon to approve extensive expenditures for blood donor service have felt honest doubt as to whether the end results really justify the expense.

At Grasslands Hospital, Valhalla, N. Y., because we have pursued a policy requiring administrative approval for the hiring of donors, we have naturally investigated each individual case and have been fairly certain that the results were well worth while. It seemed desirable, nevertheless, to prove or disprove this assumption through a survey of a number of consecutive cases. The 318 consecutive transfusions studied, were given over a period of several months, ending October 1, 1934. The study of results was made six months later.

In the accompanying tables no attempt is made to present diagnoses or other clinical data not of particular interest to administrators. It is believed that the figures given will be useful to other hospitals for purposes of comparison. Similar compilations by any hospital would help evaluate transfusion policies.

TABLE I

No. of patients transfused	207
No. of transfusions given	318
No. of above 207 patients, later discharged as improved or recovered, where the transfusion played a part in the improvement	150 or 73.5 per cent
No. of patients transfused who were later discharged as unimproved	3 or 1.5 per cent
No. of patients transfused who died	54 or 26 per cent
No. of patients transfused whose death could be attributed to the transfusion	0

The statistics in Table I are especially significant in their indication that almost three-quarters of the patients receiving transfusions were apparently improved thereby. It should be emphasized that at Grasslands Hospital blood transfusions are done for a variety of indications, and that our transfusion work during the period under study was by no means confined to cases *in extremis*. Had they been so limited the results would be much less favorable. On the other hand, a number of transfusions were given to prolong life in certain leukemias and other comparatively hopeless conditions, and although the patient eventually died, the immediate aim of the transfusion, temporary improvement, was accomplished.

Since the hospital in question is a public charitable institution, there is rarely any patient who is able to pay his donor. Expenses for blood donors become direct charges into the per capita cost of the hospital and if transfusion costs were not kept at a minimum they would deplete the budget for medical supplies to which they are charged.

TABLE II

No. of transfusions given	318
No. of transfusions where blood was furnished without cost to hospital by relatives, friends or others	249 or 78.3 per cent
No. of transfusions in which donor was paid by hospital	69 or 21.7 per cent

We should be interested in comparing the figures in Table II with those of other hospitals. Without such comparison, we are inclined to believe that they indicate careful cooperation between medical staff, house staff and social service, in securing voluntary donors, whenever possible. Aside from families and close friends, we have found the police and fire departments of our county the most helpful source of donors. These men have willingly offered assistance, often to persons in whom they had no personal interest whatsoever.

It is questionable whether any particular significance can be attached to the fact that the death rate was much higher among patients for whom voluntary donors were not obtainable.

In general, such persons included emergency accident cases where there was no time to contact relatives or friends, and friendless persons who may or may not, as a group, have been in a more depleted and serious condition at the time of their admission to the hospital. It is worth noting that

TABLE III

No. of transfusions in which hospital paid donors	69
No. of above where patient was discharged recovered or improved	32 or 47 per cent
No. of above in which patients were discharged unimproved	3 or 4 per cent
No. of above in which patients died	34 or 49 per cent

the patients whose donors were paid by the hospital, and who died, had an average of two transfusions each, while the whole group of 207 patients averaged one and a half transfusions, each. Also, the patients whose donors were paid by the hospital and who were discharged recovered or improved, received only 1.2 transfusions, each.

TABLE IV

Years of Age	*Recovered or Improved*	*Died*	*Per Cent Died*
0- 5	24	9	37.5
5-10	13	3	22
10-20	19	7	36
20-30	35	4	11.5
30-40	24	11	45.7
40-50	21	7	33.3
50-60	11	9	81.8
60-70	4	3	75
70-80	2	1	50
Totals	153	50	32

Too literal an interpretation of the figures given in Table IV, with the conclusion that transfusions are more hopeful procedures for certain age groups, would be unwise for two reasons, first, this is a comparatively small group, the number in certain age groups being particularly small; second, one would need to know more about the clinical side of the cases in order to make any useful interpretation. It is striking, however, that, in the age group of twenty to thirty years, there were only four deaths among the thirty-five patients transfused. The death rate among patients in the later decades of life seems to be higher.

The following points in connection with this small study, should be emphasized:

1. Blood transfusions were an important adjunct in the treatment of this group of cases, and the blood transfusion is believed to have been of definite help in almost all of the patients whose condition was improved.

2. Anticipation of the need of blood, so that relatives and friends can be found and used as donors, plays an important part in reducing hospital expenses for transfusion.

3. The study has relieved the administration of this hospital of any doubts which it may have held as to the value of its transfusion program.

Dishwashing Problems and Ways to Solve Them

"In an institution catering to large groups of people, the problem of dishwashing must go beyond the bounds of the simple soap and water method," says Katherine G. Sheldon, University Hospital, Ann Arbor, Mich., writing in the *Journal of the American Dietetic Association*. "This is due," she says, "both to the efficiency with which large quantities of dishes must be cleansed, and to the type of water available for the purpose.

"A satisfactory method in recent years has been to analyze the chemical composition of the local water supply, and to manufacture a powder containing counteractive constituents. The question of hardness in water is a common one. As is well known, this can be corrected by the addition of chemicals. Lye and soda ash are frequently used for this purpose. When this hardness is combined with the presence of minerals, of which iron with its tendency to stain might be an example, other agencies must be utilized. In any community where both the above conditions exist and where the hot water has been treated for hardness, it is advisable to use powder which will further soften the water, remove any stains from this source and do the usual work of removing grease.

"This powder is composed of the following ingredients in about equal proportions, for use with the most commonly found hard waters: trisodium phosphate, borax, bicarbonate of soda, ammonium chloride, oxalic acid and florescene dye. Being an alkali, the trisodium phosphate unites with the grease and forms a soap which goes into solution; the borax and bicarbonate of soda act as water softeners; the ammonium chloride helps to preserve the natural gloss of the dishes; the oxalic acid, a reducing agent, reacts with the iron in the water as well as with other substances which have deposited stains on the dishes during their use, and the dye serves as an indicator to test whether or not the required amount of powder is in the solution.

"The method of washing used in this case is to spray the dishes with a solution of the powder. This solution is returned to a storage tank for continuous use over a period of forty-five minutes. The solution contains four ounces of powder and twenty-two gallons of water, and the tank is filled one to three times, according to the length of the dishwashing period. A change of solution is made necessary because of the evaporation of some of its volatile constituents and on account of the decrease in volume that is expected."

How to Obtain Durable Paint

How many pounds of red lead should be mixed with one gallon of linseed oil? According to Francis M. Hartley, writing in the Dutch Boy Quarterly, the answer depends upon what you want from the resulting paint in the way of service.

Leading paint technologists for a number of years have been trying to determine the approximate volume relationship between pigment and oil at which a maximum durability of the coating is obtained. Among the most recent and authoritative tests is one now being conducted by the National Bureau of Standards in Washington.

So far this test definitely shows that the pigment should occupy at least 30 or more per cent of the volume of the dried paint film. This is equivalent to a mixture of at least thirty or more pounds of dry red lead to one gallon of linseed oil and hence it confirms the belief in the value of more heavily pigmented paints for increased durability and longer life.

Is Roentgenography to Be a Science or a Rule-of-Thumb Art?

CHARLES WEYL, S. REID WARREN, JR., and DALLETT B. O'NEILL
Moore School of Electrical Engineering, University of Pennsylvania

X-RAY films are generally produced and used for diagnosis by workers who do not understand even superficially the underlying physical principles of roentgenography. This state of affairs has continued unchanged for at least two decades because the diagnostic value of a roentgenogram, even of one poorly made, often greatly exceeds the value of other methods available to the diagnostician, and because the apparatus and technique of roentgenography are so flexible that it is difficult to obtain a roentgenogram which is completely useless.

Since in many important cases precise diagnosis depends upon the interpretation of roentgenograms, it is pertinent to analyze the causes of these conditions and to investigate possible means for developing a scientific approach to roengenographic problems.

The disadvantages of the rule-of-thumb method are strikingly illustrated by the results of its application to chest roentgenography. Films of the chest made in the same laboratory at different times are not comparable. Films made in different laboratories of the chests of average adults differ greatly, and are not therefore diagnostically comparable. This lack of comparability prevents the analysis of statistical data from many institutions and therefore impedes progress in the accumulation of knowledge of chest diseases. It also prevents the realization of the full benefit of the roentgenographic method in the serial examination of a given patient who undergoes treatment in a sanatorium or hospital.

Problems of Chest Roentgenography

Why is this effect so evident in chest roentgenography? In the first place, the physical problems of chest roentgenography are more difficult to surmount than those encountered in roentgenography of other parts of the body. The heart and vessels within the thorax move continually, so that roentgenographic exposures must be made in 0.1 second or less if the shadow borders are not to be blurred by this motion.

It is desirable that small differences in film density (the grayness of the finished film) be visible throughout the chest shadow. This requires careful technical manipulation, since it is difficult to obtain the full range of contrast and density with equipment as yet available. It is desired also to produce sharp roentgenographic shadow borders and this requires scientific correlation of the focal spot-film distance, the focal spot size and shape and the current through the x-ray tube, and the choice of suitable intensifying screens as well. The technique of chest roentgenography therefore depends upon the choice of a number of interdependent factors.

Chest Diseases Demand Precision

In the second place, the character of the diseases of the chest makes strict demands for precision. In some fields of roentgenography such precision may not be important. For example, to set a clean simple fracture of a bone, and to observe the healing process, no specially difficult roentgenographic procedure is required. However, if a cavity is found in the apex of a patient's lung, and that patient is given sanatorium care, it is extremely important to follow accurately the progress or retrogression of disease. It should be noted that this is important not only to the patient. Increased accuracy in the results of serial examinations also reduces the cost of treatment and adds to the value of the case history for subsequent medical analysis.

The desired accuracy in the roentgenographic procedure may be developed by solving the following problems: (1) What are the optimum physical characteristics of a chest roentgenogram? (2) What apparatus and technique are required to produce roentgenograms which satisfy the scientifically chosen standards? (3) How can these standards be accurately maintained, and how can improvements in these methods be adapted quickly and accurately?

These problems were first formulated in 1924 by Dr. F. M. McPhedran, of the Henry Phipps

Institute, Philadelphia. He reasoned that the solutions might be most economically obtained by engineers and physicists and applied through the cooperation of roentgenologists and technicians. With this general plan in mind he discussed its possible fulfillment with Dean Harold Pender, Moore School of Electrical Engineering, University of Pennsylvania, with the result that Charles Weyl of the Moore School staff began work with Doctor McPhedran.

Their work during the next few years, including the development of the pulse relay, a device for synchronizing roentgenographic exposure with the cardiac cycle, opened fields of investigation requiring a special laboratory and a small staff of engineers working full time on the project. The National Tuberculosis Association became interested and in 1929 funds were made available through its medical research committee, of which Dr. William Charles White has been chairman, for organizing the Moore School X-ray Laboratory under the direction of Doctor McPhedran and Mr. Weyl. Doctor Pender made the necessary arrangements for laboratory facilities at the Moore School.

Methods were developed for making comparable, accurately controlled tests of roentgenographic apparatus. Manufacturers cooperated by lending apparatus to the laboratory for these tests. In the course of three years all types of apparatus used for roentgenography of the chest had been tested. The data obtained from these tests were filed in the laboratory. Upon the request of any manufacturer reports were submitted describing the results of tests upon his apparatus. In most cases the manufacturer sent an engineer to consult with the laboratory staff during tests of his equipment.

Appraising Apparatus

In general, the differences between apparatus of the same type made by different manufacturers were found to be of little practical significance. In other words, if a roentgenologist chose to buy apparatus of a certain type, it was most important that he select carefully the component parts for the apparatus so that accurate control became technically practicable. It is true that there are differences in construction and operation which are easily measurable by physical tests. However, for a first attempt to standardize roentgenographic apparatus and technique, it is more important to learn how to use a particular assembly of apparatus than to investigate detailed differences which exist between apparatus of similar type made by different manufacturers.

Consultation with a number of roentgenologists and an examination of the technical literature of roentgenography revealed a peculiar condition. The roentgenologist, whose training did not in general include a thorough instruction in the principles of physics, had no means at his disposal for choosing apparatus and technique for producing a high standard of roentgenographic output. In fact, he had no means of choosing such a standard. The manufacturer on the other hand generally felt that it was neither his duty nor his privilege to do more than suggest methods for producing films of the type which the roentgenologist chose. This choice usually was based upon results which had been obtained in the roentgenographic laboratory where the roentgenologist had received his practical training. Those who had investigated some of the physical phenomena underlying roentgenography had described their work in papers published in medical journals. However, their approach was in many cases so detailed and technical that the roentgenologist had been unable to apply practically the results of these careful physical investigations.

Establishing Scientific Standards

It was found, therefore, that there existed a condition in which no scientific standard for roentgenograms had been chosen, and that those who were concerned with the production and use of roentgenograms were making no concerted effort to develop such a standard or to apply it.

In view of these conditions, a plan was evolved including the following important features:

1. Surveys of x-ray laboratories in sanatoriums were planned to find what apparatus and techniques were being used by specialists in the field of chest roentgenography.

2. Investigations were planned to find out what features of apparatus and technique were important for the maintenance of a chosen quality of roentgenogram.

3. Methods were sought for determining the optimum physical characteristics for a roentgenogram of the chest with a view to setting up a reproducible standard.

4. To apply the results of this work to the roentgenologists, a plan was worked out with the National Tuberculosis Association for arranging consultations between members of the laboratory staff and roentgenologists.

5. The material collected during this process was to be organized into a book which might be easily understood by roentgenologists and technicians, and which would place in their hands practical recommendations for obtaining and maintaining a physical standard for high quality chest roentgenograms.

Throughout the course of this development it has been recognized that the chief duty of the roentgenologist is to use the chest roentgenogram as a means of diagnosis. It has been felt, therefore, that complicated tests requiring the personal attention of the roentgenologist in his own laboratory would be of value to few men and should not therefore be made a part of any recommended standard procedure.

During the course of the last three years the work has progressed along these lines. A number of roentgenologists have corresponded and consulted personally with members of the staff of the laboratory concerning specific problems of roentgenographic apparatus and technique. During this period a number of manufacturers have been consulted with a view to suggesting changes in apparatus used for chest roentgenography.

Technical Factors Interdependent

The detailed methods for standardizing roentgenographic technique are discussed in a book recently published.[1] This standard has been chosen so that apparatus of many different types may be used. For example, it is shown that to obtain uniform comparable roentgenograms of the chest, densities and contrast in the roentgenograms should be constant regardless of the differences in apparatus in different laboratories.

Under this assumption, apparatus which delivers 100 kilovolts-peak, at 100 milliamperes, may be used to obtain the same density and contrast relations as apparatus which is capable of delivering 100 kilovolts-peak at 500 milliamperes. It is possible, of course, to use a shorter exposure time and a longer focal spot-film distance with the larger equipment, and the benefits of this equipment may be shown to be technically important. Nevertheless, the contrast and density relations of the roentgenograms obtained with these two types of apparatus can be made identical, and therefore the films are diagnostically comparable.

It has been recommended that a small aluminum ladder of three steps be attached in front of the cassette holder to produce a physical record of exposure and the developing procedure for each roentgenogram. This, in fact, is the basis upon which the standardized procedure has been developed. As has been pointed out, the technical factors of chest roentgenography are interdependent. It is therefore important to use as a calibrating device some means which will detect uncontrolled changes in any of these factors. The aluminum ladder fulfils this requirement by producing upon the film a record which depends upon all technical factors associated with the x-ray exposure and the processing of the film.

The practical development, application, and improvement of roentgenographic standards can be obtained only by careful cooperative study. The methods now being applied in a number of sanatoriums will, it is hoped, lead to a clear demonstration of the benefits of this scientific approach and to its application by a large number of roentgenographic laboratories.

There is no reason to believe that this approach to the problem of chest roentgenography might not be profitably applied to the field of general roentgenography. In fact, there are a number of roentgenologists in some of the large general hospitals who have carefully set up physical tests and standards of this type for calibrating their roentgenographic apparatus and for calibrating the processing of x-ray films in the dark room. By this procedure, these men are in a position to predict accurately the contrast and density relations of all of the roentgenograms which are produced in their laboratories.

It should be emphasized that the scientific approach to roentgenography will not admit a permanent standardization of apparatus and technique. As more and more facts are learned concerning the roentgenographic procedure, improved methods will be developed. However, these improvements may be most quickly and accurately applied only if the entire procedure is developed upon a measurable reproducible physical basis.

[1]Weyl, Charles and Warren, Jr., S. Reid. Apparatus and Technique for Roentgenography of the Chest, Charles C. Thomas, Springfield, Ill., 1935.

A Hospital Should Take Pride in Its Anesthesia Department

The organization and management of a department of anesthesia in a 200 to 400-bed hospital was discussed by Dr. B. C. Leech, director, department of anesthesia, Regina General Hospital, Regina, Sask., at a Hospital Standardization Conference of the American College of Surgeons. Doctor Leech emphasized the following points in his address:

1. An anesthesia department should consist of a full-time director, part-time associate anesthetists and interns.

2. The director should be responsible for the training of his staff, maintenance of equipment, assignment of cases, preliminary medication, keeping of records, and the presentation of an annual analytical report of his department's work.

3. Careful preoperative categorization of every case as to risk is imperative.

4. Every hospital of any size can operate a good anesthesia department at no additional cost.

5. A good department of anesthesia should be an important component of any hospital of over 200 beds. It soon becomes a matter of pride to any good hospital, and of attractive and comforting assurance to the whole community, especially to the surgical patient.

Western Washington's Contribution to Mental Hospitalization

By FREDERICK HEATH
Heath, Gove & Bell, Architects, Tacoma, Wash.

WITH the completion of the first two wings of the first trialar building of the Western State Hospital, Fort Steilacoom, Wash., the complete rebuilding of a great mental hospital is well begun. The opportunity to carry out this revolutionary plan is due to, first, the interest of the new governor of Washington, Clarence D. Martin; second, the recalling as superintendent of Dr. W. N. Keller who had been superintendent of the old Fort Steilacoom Hospital from 1914 to 1923; third, acute overcrowding, with 2,200 patients housed in buildings having a normal capacity of only 1,500; fourth, the crying need for reconstructing old buildings erected between 1886 and 1898, and fifth, the availability of PWA and CWA money.

Two firms of Tacoma architects, Heath, Gove & Bell and Mock & Morrison were selected to design the new hospital group. Both firms have had much experience in institutional work.

The Fort Steilacoom Mental Hospital was established by the first territorial legislature in May, 1871, on the site of historic Fort Steilacoom nine miles from the city of Tacoma. The location is a glacial drift plateau from whose heights can be seen island dotted Puget Sound and the Olympic Mountains on the west, the Cascades with Mount Tacoma on the east — an area covered with fir trees and diversified with hills and a deep canyon. At Old Fort Steilacoom Generals Grant and Sherman were quartered in the pre-Civil War days, and nearby Chief Leschi met his tragic fate at the end of the Indian War in 1853.

Above is a view of the west end of the new women's ward building at the Western State Hospital. The center picture shows the lobby where blooming plants and cut flowers lend an air of cheerfulness to the scene. Below is a view of one of the large day rooms all of which are almost completely glazed.

The existing buildings follow the old McBride plan with a high basement, three stories of forbidding brick walls with narrow barred windows and steep picturesque roofs. The interior construction is of frame and is a fire menace, although every possible precaution has been taken in recent years to make the buildings safe. A fine park of cultivated trees in addition to the remnants of the fir forest had grown up and it was decided not to interfere with the landscape any more than was necessary to accommodate the new buildings.

Almost every possible arrangement for the new layout was studied and finally it was decided to follow in general the old grouping of buildings, with the administration building in the center facing the east as before; the existing kitchen to be remodeled, immediately behind it, and the present fine fireproof congregate dining room, erected in 1927 adjoining the kitchen, to be retained.

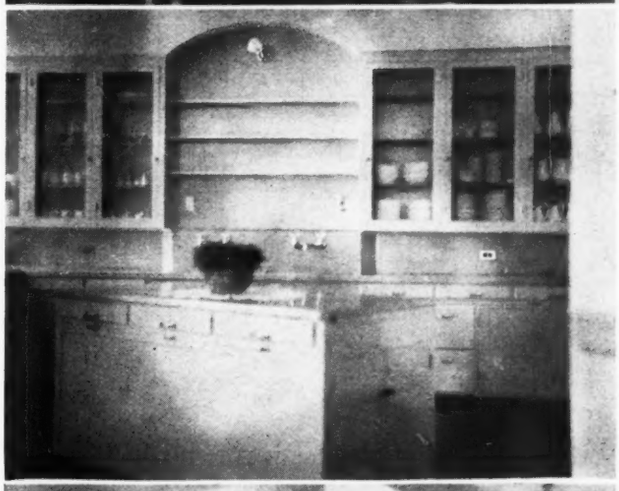
Old Buildings to Be Replaced

To the south of the new administration building is the male receiving ward now under construction, and to the north a female receiving and treatment ward. Extending westward and connecting with these two receiving buildings, wards will be built for men along the south and for women along the north side of the site. They will be continued to the west, and the old buildings will gradually be torn down and replaced with modern ones.

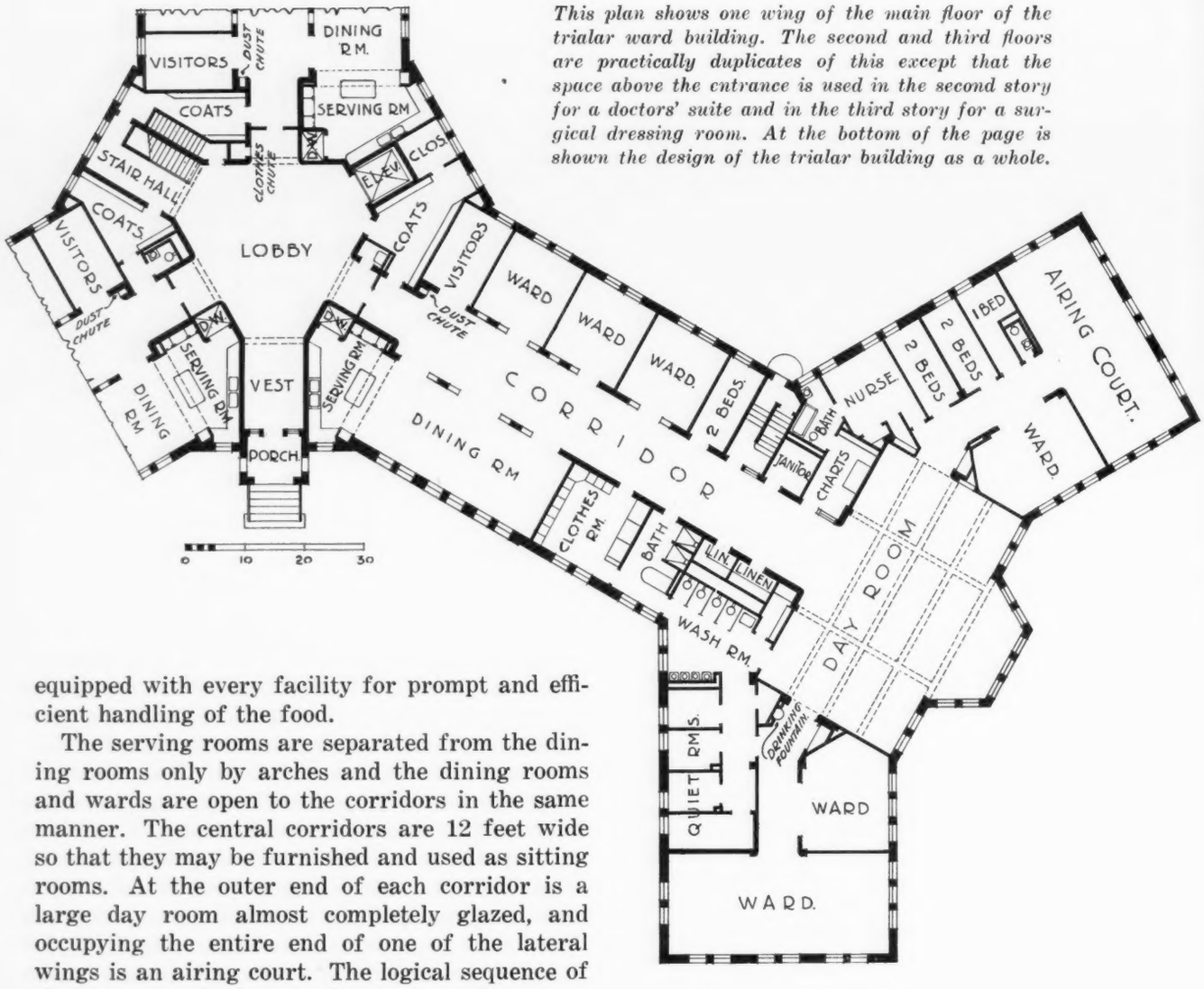
Two wings of the first trialar building of the female group are now occupied. A plan is shown here of one-third of the main floor. The second and third floors are practically duplicates of this except that the space above the entrance is used in the second story for a doctors' suite and in the third story for a surgical dressing room.

The great advantages of the trialar plan over the H-shaped, U-shaped, straight or quadrangular building around a court, are readily apparent. Using 120° angles throughout the plan eliminates shadows and musty courts. The great number and size of windows and the low sills take full advantage of the light thus obtained and give beautiful views of the picturesque grounds.

The basement is not excavated except under the full length of the central corridors, at the rotunda and for the ample storage rooms near the center of the building. These basement corridors are used for the installation of all the feed pipes of the building which are thus readily accessible. Economy of plan is secured by the concentration of all of the services of the building around the hexagonal rotunda at the center. Food is received from the main kitchen in covered heated motor carts, the basement entrance being sufficiently large for the entrance of an automobile. Three dumb-waiters carry the food in covered heated containers directly to the nine serving rooms on the three floors above. These serving rooms are



One of the dining rooms in the new women's building is seen at the top of the page. In the center is one of the serving rooms of which there are nine. These rooms are separated from the dining rooms only by arches and the dining rooms open in the same manner on to the corridors. The bottom picture shows another of the day rooms.

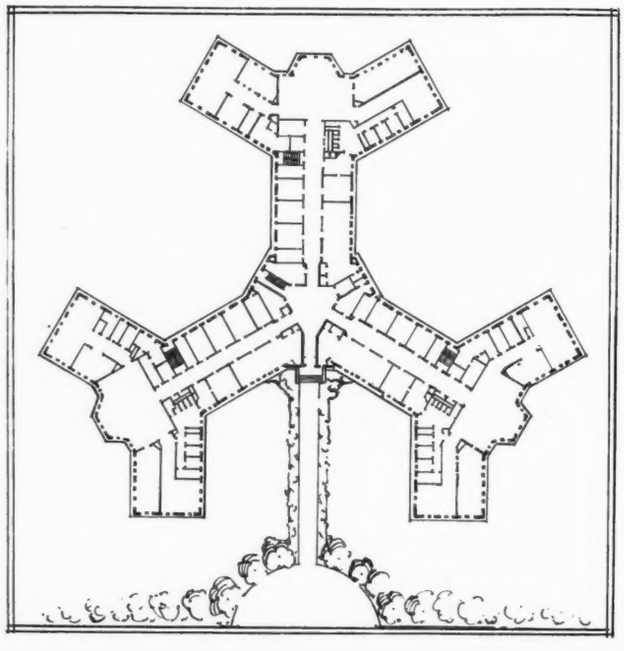


This plan shows one wing of the main floor of the trialar ward building. The second and third floors are practically duplicates of this except that the space above the entrance is used in the second story for a doctors' suite and in the third story for a surgical dressing room. At the bottom of the page is shown the design of the trialar building as a whole.

equipped with every facility for prompt and efficient handling of the food.

The serving rooms are separated from the dining rooms only by arches and the dining rooms and wards are open to the corridors in the same manner. The central corridors are 12 feet wide so that they may be furnished and used as sitting rooms. At the outer end of each corridor is a large day room almost completely glazed, and occupying the entire end of one of the lateral wings is an airing court. The logical sequence of clothes rooms, bathrooms, lavatories, toilet rooms and other services concentrated at the center of each three-winged ward is a marked convenience. A nurse's station with bedroom and private bath is across the hall from the water section and commands a view of the entire ward.

A service staircase is close at hand and on the opposite side of the hall is a secondary corridor with several quiet rooms situated near the bathroom and toilet. Coat rooms and visitors' rooms are accessible from the central rotunda where an elevator and stairway are placed. Dust chutes and linen chutes are also near the center where they can be reached from the automobile rotunda in the center of the basement. An effort has been made to secure variety in the wards by the size and form of the arched and pillared openings of the rooms, and all walls are decorated in cheerful colors. Pedestals for blooming plants and cut flowers abound. Often in summer there are as many as 3,000 vases in the hospital. Cabinets for the personal possessions, magazines and fancy work of patients are provided and many other conven-



A front view of the new women's building, which is of reenforced concrete faced with hard brick in shades of gray and pink. Economy of plan is gained by concentrating all services around the hexagonal rotunda.

iences are installed to create a homelike atmosphere.

The building is of reenforced concrete, faced with a beautifully textured hard brick of varying shades of gray and pink with cream colored Wilkeson stone trim and a variegated reddish-brown tile roof with copper gutters. Tile floors and base are used throughout the water sections with glazed tile wainscot in soft colors in the showers and toilet rooms. The central rotunda has a terrazzo floor, but practically all rooms, wards and corridors are covered with linoleum with a special linoleum cove base. The windows have stools of precast terrazzo and rounded jambs. There is little wood trim throughout the building but the doors are solid, veneered with fir and enameled. The wards being open but few doors are necessary.

Plumbing Is of Modern Design

An unusual amount of electric conduit has been put in to provide for future developments of the lighting and other electrical service. The plumbing is of modern design. The heating and power plant of the existing hospital is situated in a well arranged power house which has been recently enlarged. Steam is conducted by walking tunnels throughout the grounds and from these tunnels branches are extended. The heating system, in general, is a modification of a vapor vacuum steam system.

The building is too large to make it economical to feed the entire heating system from one point. It was therefore divided into sections and a reducing station placed in each wing. These reducing stations are fed at normal operating pressure of 70 pounds, provision being made for a separate high pressure line to an auxiliary hot water storage heater.

In order that the steam may be shut off at night, without the operator having to leave the boiler plant, the main high pressure line is controlled from the plant by an electrically operated remote control valve. This valve has a delayed action taking a full fifteen minutes to open. This eliminates the possibility of hammering or sudden expansion in the pipes and turns the steam on the system gradually. The low pressure heating system is laid out in three separate zones for each wing, each zone carrying approximately 1,000 feet of radiation. Each one controls a separate face of the building and is controlled by a compressed air valve actuated by a thermostat installed on the third floor of each zone. These thermostats automatically take into consideration the position of the sun and the direction of the wind.

In addition to the zone thermostat controls, the system is further controlled by an outside thermostat on the roof. This thermostat is so set that under extreme temperature conditions it allows the low pressure heating systems to operate at 2 pounds pressure. As the outside temperature rises the outside thermostat operates to cut the pressure down so that its normal operating point at 40° above zero outside is approximately 8 ounces.

Radiators Are Concealed

The entire building uses copper convector type radiators concealed under the windows in the outside walls. This radiation is not controlled individually by valves but depends entirely upon the zone control to maintain an even temperature within the rooms of that particular zone. In moderate weather the system will operate on subatmospheric pressure.

The air in the building is kept fresh by means of a simple exhaust system, no attempt being made to introduce heated air into the building.

The main toilets of each wing are taken care of by exhaust fans which change the air of the toilet room once every five minutes. The dining rooms and serving rooms are exhausted by a separate fan and the small interior toilets are taken care of by still another fan. The present structure has four exhaust fans, having a total exhausting capacity of approximately 20,000 c. f. m. With such an abundance of windows and the open wards it was deemed unnecessary to install a ventilating system for the patients' living and sleeping quarters. This theory of natural cross-ventilation has been justified in operation.

Wrought Iron Piping Used

The plumbing and sanitary equipment represents one of the best modern installations for this type of building. All sewage and drainage lines above ground are of genuine wrought iron pipe with galvanized recessed drainage fittings. Underground lines as far as the main institution sewer are all extra heavy cast iron soil pipe with lead and oakum joints. Rain water from the outside downspouts is carried in cast iron pipe to a storm sewer.

A cold water service is derived from the institution water main and extends through a strainer and regulating valve, each with by-pass, to a cold water header. Ten branches are taken from the header to various parts of the building. A continual movement of the cold water in the pipes is assured by extending the risers through the attic to a cold water circulating header from which the supply to the flush tank is derived through a ball cock. This circulation prevents the stagnation and warming of the cold water in the mains and risers. All flush lines to water closets are derived from the flush tank, and also a line supplying the kitchen sinks and fountain at the entrance. This is to maintain a practically continuous circulation through the cold water risers supplying the tank.

Hot water is furnished by a hot water generator of 370 gallons storage capacity with steam supplied copper coils having an hourly heating capacity of 2,200 gallons. A cross connection is also provided to the hot water supply from the power plant so that the steam service to the building may be entirely shut off in summer.

All tanks and hot and cold water piping are covered. All lines are painted on the outside in accordance with a distinguishing color code and aluminum strips with raised letters are provided at all valves for ready identification.

The fixtures are of modern and substantial design. Water closets are of vitreous china syphon jet type with seat operated flush valves in the patients' quarters and exposed flush valves in the nurses' rooms. The basins are of enameled cast iron with heavy chromium plated brass trimmings. Special showers with vandalproof heads are provided for bathing the patients, in addition to free standing bathtubs. The nurses' quarters are provided with bathtubs with shower heads. The kitchen sinks are of monel metal and are provided with grease traps. Slop sinks, sinks and drinking fountains are provided in generous numbers.

Electric energy for the entire hospital is obtained from the municipal light system of Tacoma, whose 55 kv. line terminates within the grounds, where two 500 kva. transformers step the energy to 4 kv. for local distribution to the various buildings. The latter service is by means of underground conductors, with vaults for changing the 4 kv. to usable voltage being located generally within the buildings served.

All wiring is drawn into rigid, thick walled conduit. Wire with fire resistant braid was used throughout.

Provision has been made for installing radio receiving sets in various rooms chosen by the superintendent. No doubt the ultimate choice of such sets and serving system will be one whereby any broadcast may be received by any of the sets installed in the building. The conduits serving the various outlets have been terminated in the attic in such a manner that almost any antenna system can be accommodated, either by means of a single antenna for each receiving set or by means of a central antenna system serving the entire institution.

Sympathetic Treatment Is the Rule

This group of wards is intended for a high class of not very violent women. With more restless patients a larger number of smaller wards and many private rooms closed with doors would be necessary, but it is intended to minimize such arrangements even for the most troublesome inmates. Little trouble has ever been experienced with open wards in this hospital owing to the sympathetic, humane methods of treatment, and such rooms contribute greatly to the cheerfulness and the sense of freedom of the patients.

An immense amount of study was made before starting the drawings for this building, covering not only the details but its relation to the entire institution. Visits were made to numerous hospitals and correspondence carried on with superintendents all over the country. The National Committee for Mental Hygiene and the American Hospital Association library at Chicago were also freely drawn upon. The files of The MODERN HOSPITAL and other papers were studied carefully.

Let Us Go Modern

By FRASER D. MOONEY, M.D.
Superintendent, Buffalo General Hospital, Buffalo, N. Y.

PEOPLE read certain books because they are out of the ordinary. For the same reason they go to see outstanding motion pictures and plays. Perhaps this is also the reason that many hospital annual reports do not receive much attention. It might be well for hospitals to spend more time and thought on what is one of the few pieces of ethical advertising available for them.

Annual reports are published for four main reasons:

1. To keep the public informed of the activities of the institution.
2. To furnish a permanent record.
3. To make a yearly inventory of hospital activities.
4. To place the needs of the hospital before the public and particularly before philanthropically minded persons.

The following suggestions are elementary and perhaps for that very reason they are important.

As the information clerk gives the first impression of the hospital so does the cover page give the first impression of the annual report. Let the cover page convey as much information as possible, for example, present on it a composite picture of the hospital or its main entrance, with the following information: "The 76th Annual Report of the ABC Hospital for the Year Ending December 31, 1935." It is surprising how many times it is necessary to search through the pages of one of these reports to find if it is for 1935 or 1915.

In these days of labor-saving and time-saving gadgets, it seems that there should be more time for reading than was available to our forefathers. Such, however, is not the case, and the tabloid form of presentation of literary documents is becoming more and more popular. The hospital may have to bow to this new age and publish its annual reports with illustrations of sufficient human interest to show the activities of the institution by sight rather than by word pictures.

Case stories are generally fictitious. A picture is more likely to be believed but it should be sufficiently large to be easily seen, clear enough to show detail and captioned in such a manner as to make the most of it.

Every page of the report costs so much in dollars and cents, so insist that the printer makes it readable. On opening annual reports we usually find a list of trustees and the roster of the staff with the set-up showing the organization of both bodies. Let us be guided by the method used in the classified section of the telephone directory, which ensures a simple and readable arrangement. It may not suit the finer sensibilities of the printer as to the last word in printing but it may mean that in many cases the report will be read rather than shelved.

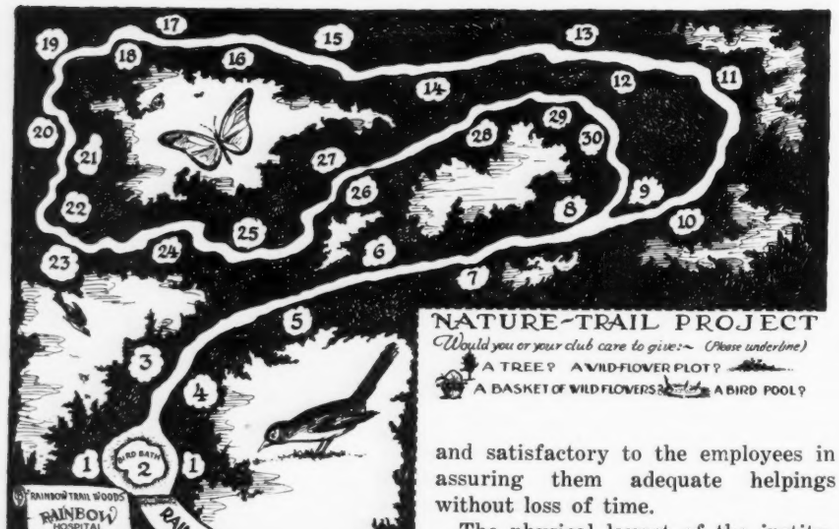
Financial statements may be given in detail but should not be boresome. All readers are not economists, accountants or statisticians, and for this reason figures should be interpreted and thus made to tell their story. On the other hand, they should be in sufficient detail for the statistically minded, for these people get the story more rapidly from the orderly arrangement of facts than from reading matter which they will skip as tiresome. Some hospitals enclose a separate leaflet bearing the financial statement while others give a summary with a note to the effect that the detailed report will be forwarded on request.

A section of the superintendent's report usually states the outstanding needs of the hospital. A novel and striking manner in which many of these requirements may be brought to the attention of those who may be able to supply them is demonstrated in the recent report of the Grace Hospital, Detroit, Mich. The report carries a separate booklet setting forth pictures of different pieces of equipment, with their price, while the cover page reads "Needs of Grace Hospital."

Do not spend money to publish what will not be read. For many years the hospital with which I am connected published in its report a list called "Nativity of Patients," another list called "Diseases and Conditions," and one or two additional ones of like nature. May I suggest that before preparing your 1935 report you study the one you published in 1934 and tear out any sections you believe are seldom if ever studied.

The outstanding piece of fiction for any one month is frequently spoken of as "The Book of the Month." Perhaps it might be well if we had a "Hospital Report of the Year."

What Others Are Doing


NATURE-TRAIL PROJECT
Would you or your club care to give:— (Please underline)
A TREE? A WILD-FLOWER PLOT?
A BASKET OF WILD FLOWERS? A BIRD POOL?
BIRD BATH
RAINBOW TRAIL WOODS
RAINBOW HOSPITAL FOR CRIPPLED CHILDREN
RAINBOW HOSPITAL SUN PORCH

Crippled Children to Enjoy Own Trail in Woods

In the natural woods which surround the buildings of the Rainbow Hospital for Crippled and Convalescent Children, South Euclid, Ohio, a nature trail is being built by the conservation committee of the Garden Club of Ohio for the enjoyment and instruction of the small patients.

Garden clubs throughout the state are assisting the committee by donating trees, wildflower plots, bird baths or planting material, and the children are marking the plants as they are assigned a permanent position.

On the map of the Rainbow Trail Woods, shown here, the numbers designate those sections of the woods which need improvement. Each club cooperating with the committee is alloted a section. No plants foreign to the district will be introduced since the plan of the committee is to restore the natural beauty in that area of the woods available for the project.

"Serve Yourself" Proves Popular at St. Charles

Self-service in the dining rooms of the St. Charles Hospital, a 100-bed Catholic institution at Aurora, Ill., has worked out advantageously, having proved economical from the standpoint of the hospital in cutting overhead and reducing food waste, and satisfactory to the employees in assuring them adequate helpings without loss of time.

The physical layout of the institution is well adapted to such procedure. On one side of the wide corridor is the kitchen. On the other side are dining rooms for the doctors, nurses, maids. A large window opening from the kitchen on to the hallway affords adequate room for display of food on steam tables. Employees merely line up and with the help of two or more kitchen attendants are served those dishes appearing on the menu. They then proceed to the dining room designated for their particular use. Care is given to see that the line moves rapidly, thus ensuring against delay.

This plan reduces the number of dining room attendants and provides the individual with far more independence at meal times.

Discouraging Gifts From Business Firms

In an attempt to discourage the practice of gift giving by business firms at Christmas time, the Children's Memorial Hospital, Chicago, accompanies each check sent out in payment of an October bill with a mimeographed slip which says:

Re: Christmas Gifts

It has been the custom of certain firms to attempt to present Christmas gifts to the hospital personnel.

Good merchandise, with satisfactory service and price, are all we seek from any firm. Please do not offer Christmas gifts to anyone.

(Signed) Mabel W. Binner,
Superintendent.

Increasing Collections From Accident Victims

Most hospitals which are called upon to receive accident cases confront the problem of charges for this service, and no doubt in most instances still follow the method of allowing the patient to pay what he can or will at the time he is treated.

A 400-bed hospital in New Jersey which had followed this method for many years, found that in a series of ten years its average collections had amounted to 15.7 cents per case. The contribution box was thereupon taken out of the accident room and the staff was instructed not to collect fees but to advise the patient that a bill would be sent. A clerk was engaged whose primary duty is to take up each morning the previous day's charts from the accident room and to send out bills based on the nature of the service, and as far as possible, upon the status of the patient. The theory is that persons in the private patient class should be expected to pay approximately what they would have paid their private physician if treated in his office.

The result of this change in policy was a jump from 15.7 cents per case to 79 cents average for a four-year period, the collections in the fourth year being $1.06½ per case. The earnings of the accident room jumped from $522 in 1930 to $3,714 in the following year, with only a slight increase in number of cases, steadily building up to the present time when they average about $1 per patient. Many patients are treated, however, from whom no money is collected, indicating that all patients who can pay are doing so as the result of this effort. The increased collections are five to six times the cost of the extra clerk, and have changed the accident department of the hospital from a heavy liability to a self-sustaining service.

Probably you can think of one or more practical ways to save time or increase efficiency. The Modern Hospital will welcome your ideas to put before other hospitals

The Social Worker Links Patient, Doctor and Hospital

By MABEL McGUIRE

Director of Social Service, Metropolitan Hospital, New York City

IN HIS private practice the doctor does much toward the social adjustment of his patients. Every physician knows that the recovery of many patients can be hastened by clearing away mental doubts and by relieving worries that wear out courage.

But in the busy ward or clinic, where more than one doctor is concerned in the treatment of the patients, no one medical man can take a great amount of time to discover whether or not the sick individual has run amuck in our complex social order. The doctor gives his time and strength within the hospital walls for the treatment of disease, for which he is trained. The mounting costs of hospital care must be taken into consideration and the patient removed as soon as possible.

Complicated Adjustments Follow Illness

The patient who applies for free care, generally speaking, is fighting against odds of one kind or another. It may be that he is able to meet all his obligations except the added cost of caring for himself when ill, and his removal as soon as possible from the hospital to a convalescent home is all that is necessary. Would that all the citizens in this country, when they became ill, had no more complicated adjustments than this!

Each hospital is an organization offering services for the treatment and prevention of disease, and its services reach into every stratum of the community life. We cannot isolate ourselves by forgetting that the patients whom we treat are individuals coming out of that maelstrom of seething human beings which makes up a community, and we cannot forget that they must leave us and go back into it.

Is the patient going to continue his treatment, which has cost this community so much? Does he understand the doctor's recommendations and know how to carry them out? What are the difficulties, if any, which might frustrate his progress toward the fullest possible health and readjustment into his place in community life? These are the questions the medical social worker should be able to answer for the doctor and the hospital. She should be able, by using all the resources offered by the hospital, the doctor, the community and the patient himself, to assist in overcoming the patient's obstacles on his road to recovery.

What are some of the problems regarding which attending physicians can obtain help from the medical social worker? The patient who needs convalescent care and cannot, or should not, obtain it at home is one of them. Often the home is too noisy or it is crowded and the mother is so overworked that obviously the patient could not obtain the rest and quiet necessary to regain strength. The proper selection of a convalescent home; the arrangements for the patient's removal there; proper clothing and enough to last for the allotted period; the progress report from the convalescent home and the follow-up visit after the patient returns — all these are matters that fall within the real province of the hospital social worker.

Often patients, especially men, insist upon convalescing at home, even when all the factors indicate that they should not do so. The social worker advises the family and explains to them the doctor's orders for the patient. Orders for special medical or surgical supplies should be referred to the medical social worker. She will consult with the patient or his family and arrange either for full payment, part payment or for a loan, or she will see that the medical or surgical supply is provided free of cost. She will make sure that instructions regarding these orders are carried out, that the surgical requisition is properly filled and that the patient returns to the clinic so that the doctor can check the appliance.

Home Visits Usually Profitable

Patients who are worried about family conditions at home should be referred to the social worker. The mother who has left behind her children, or the father who has been forced to interrupt his work in order to receive free care, is often so worried that response to medication and treatment is retarded. To talk with someone who has made a home visit and who can give reassur-

ance is a help to the patient, to the doctor and to the hospital. When the proper medico-social history is not obtainable, the social worker can be used to great advantage. Perhaps a record of previous illness is necessary, either from another general hospital or from a psychiatric or penal institution. Reports from other agencies of all kinds are obtainable and may be sought by the social worker.

Family Slant of Value in Diagnosis

Family history often brings out important information. I remember a man who several years ago came into our hospital a number of times. He complained of acute rheumatic pains of several years' duration, but our doctors could find nothing wrong with him. He created disturbances and refused to leave when discharged. We found through home visits and the family agency to which the family was known that he had not worked for three years, had complained all this time of pain, was irritable to the point of complete dominance of his wife and children and had threatened their lives repeatedly. As his behaviour on the ward was not such that he could be transferred to Bellevue Hospital for examination, the social worker was helpful in persuading him to go home, promising that she would see him there. Upon examination at Bellevue he was found to be mentally unbalanced and was committed to Central Islip State Hospital.

Patients who need temporary or permanent homes should be referred to the social worker. Children who are orphans, homeless and destitute patients, those who are unidentified, unmarried mothers, deserted babies or mothers, after they have been ill, should all be referred to the social worker before discharge. Because it is part of her job to know all agencies in a community she can steer these patients to the proper source for future care and planning.

In the cardiac clinic, the diabetic and eye clinics, the social worker is invaluable. It takes more than one home visit to determine whether a diabetic patient, who insists that she is following her diet, but whose blood sugar remains high, is using the cunning which we know is sometimes part of the disease in taking too much sugar and carbohydrate.

The cardiac patient is not always able or willing to answer truthfully when asked if she can remain in bed when advised to do so by the doctor. She thinks she can, perhaps; but if her bed must be shared by two other members of the family, if there is not sufficient bed covering, or if there are from five to eight people in three rooms, how can she get the rest which might prevent a chronic condition? What other arrangements can be made for her? The social worker should be able to help give the answer.

In many hospitals every tuberculous patient is referred to the medical social worker. Reference to the hospital admission bureau and the department of health and examination for all contacts are necessary. All venereal disease cases should be known to the social worker also. Contacts should be examined. Regular treatment is necessary for these patients and prevention of disease is important for those who live in close contact with them. Social problems abound when either of these diseases exists, especially in families.

In considering the functions of the medical social worker it is necessary, I think, to examine closely the form of society under which we live. It is through the methods of communication within the social body in which we live that the medical social worker functions chiefly. She is the interlocking agent between the hospital, the patient and all the other organizations which we have set up in our complex social order. Human beings are able to withstand troubles, disappointments and hardships to an astounding degree, but when illness strikes they often become bewildered and helpless. Then the social worker is there, with the doctor, the nurse and the hospital administration, to lead the way out with infinite patience, understanding and knowledge.

Protecting Premature Infants

A study of the death certificates of infants born and dying in hospitals having more than 200 births a year was made by the Chicago Health Department recently. According to the *Journal of the American Medical Association*, the study showed that the death rate of premature infants under fifteen days of age was as low as 5 per thousand births in some institutions and as high as 50 per thousand births in others. The low death rate in some hospitals was attributed to three requirements:

1. The newborn infant is scrupulously protected against chilling from the moment of birth. Incubator facilities maintained at a proper temperature are constantly available for these infants, and weak infants are not oiled or bathed until this seems safe.
2. Attendants are trained in proper methods for resuscitation. Small catheters and oxygen are always available. Undue trauma is avoided.
3. Every effort is made to obtain breast milk until the mother's milk is available, and an effort is made to stimulate the mother's breast by manual expression.

Hospitals in which death rates are high from prematurity were found to be failing in one or more of these points. To meet this problem the department of health has established a twenty-four-hour incubator ambulance service for hospitals that do not have incubator facilities and for physicians delivering mothers in the home.

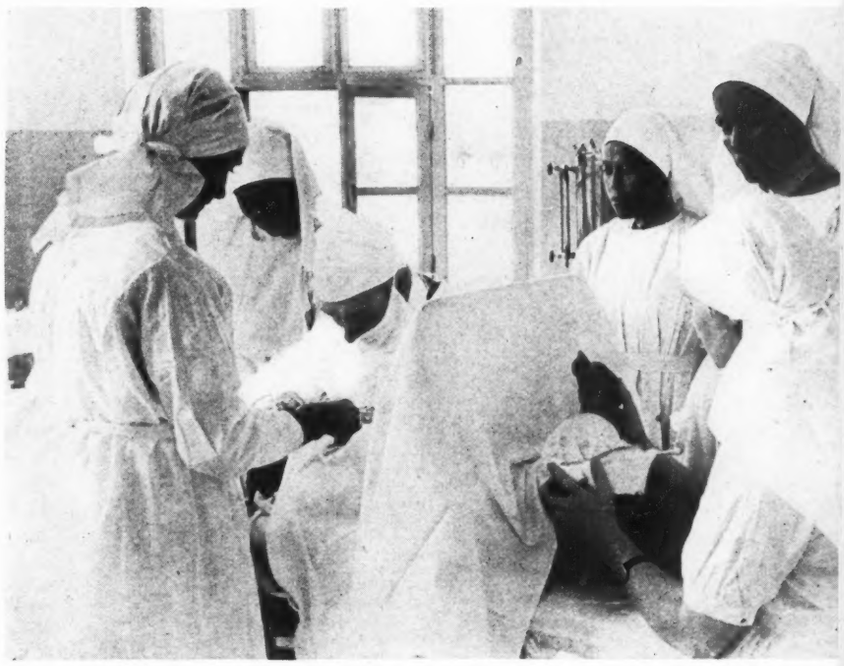
Hospitals in the War Zone

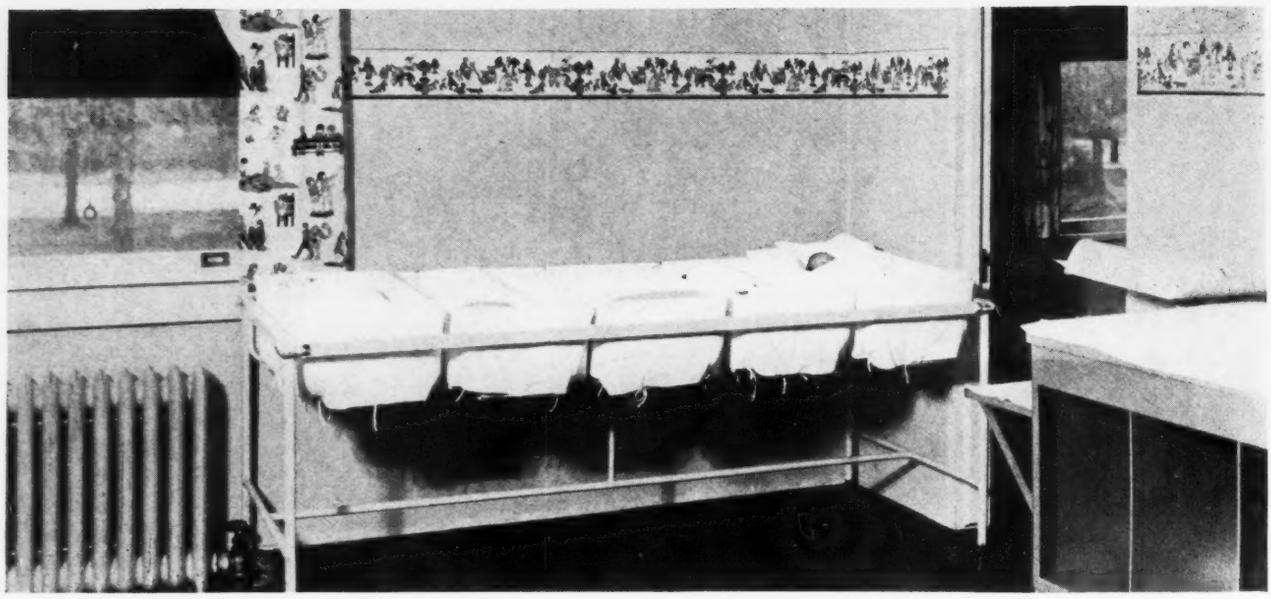
ETHIOPIA, center of the war zone, has at least one modernly equipped hospital, the 100-bed Zauditu Memorial Hospital, erected by Emperor Haile Selassie in Addis Ababa as a model institution and completed in 1932, when he presented it to the Seventh Day Adventists' Mission.

Composed of four stone buildings, shown in the bottom picture, it is fully equipped with an x-ray department, a hydrotherapy department and operating rooms, one of which is pictured at the right. Dr. G. C. Bergman, Los Angeles, and Dr. T. C. Nicola, Montebello, Calif., are in charge of the institution, assisted by native nurses.

The George Memorial Hospital, shown at the top of the page, is a three-story building, located just outside Addis Ababa. It is operated by the United Presbyterian Mission.

A British ambulance service is at present being formed in consultation with the International Red Cross in Geneva, for use in Ethiopia. It has been estimated that the cost of one properly equipped ambulance, clearing station and field hospital and its maintenance for three months would be $175,000. An American ambulance service has also been organized.





A new era has started for The Paul Kimball Hospital, Lakewood, N. J. Its story, once told in red ink, is now indelibly written in neat black.

A Hospital Made Right for the Patient

By RAYMOND P. SLOAN
Associate Editor, The MODERN HOSPITAL

A VISITOR swung into the driveway of The Paul Kimball Hospital in Lakewood, N. J., a short time ago from the busy highway that connects New York and Atlantic City. It was after dark and through the heavy shadows of that region's famous pine groves, the lights of the attractive seventy-five-bed hospital shone invitingly.

The last visitor had gone — the hour had come when hospitals large and small assume, if ever they do, an air of quiet tranquillity. A young woman in nurse's uniform stood at the entrance, in her hand a moist cloth with which she was removing dexterously a fingerprint from the glass door. Off duty and on her way to the nurses' home across the boulevard, yet time enough — and interest — to remove the ravages of visiting hours.

There was a time, and not so long ago at that — three years to be exact — when such an incident would have been unheard of at Paul Kimball. That was before the period of its Renaissance, however.

Unlike the town in which it is located, a resort town that has known better days, Paul Kimball Hospital has seen its worst days. Its story once told in extravagant strokes of red ink is now indelibly written in neat black. Public esteem which one time regarded it askance now smiles benignly upon it and its activities. The financial pinch is painful, its needs vital, but it is meeting its bills and even paying off obligations.

The hospital was first started in the days before Lakewood was commercialized. When it was erected in 1913, it boasted but twenty-five beds, sufficient at that time to meet the community's needs. It was, in fact, a memorial to Dr. Paul Kimball, family physician to those families of wealth and prestige who lent so much distinction to the town in its early history. Then, when additional room was necessary, enough money was raised in 1922 through private subscriptions to add a wing, making the total occupancy seventy-five beds. Even then, however, Lakewood had not become cluttered with rooming houses and small hotels to the extent it is today, its gentle, invigorating climate had not yet been exploited by hordes of careless visitors.

Paul Kimball serves Ocean County, comprising a population of between 15,000 and 20,000. Twenty per cent of its work, however, is with out-of-towners who during the winter months take advantage of the healthful climate of Lakewood and in summer migrate to seaport resorts scattered along the ocean front.

A patient undergoing light treatment.

This transient population presents its own problems. Because of its location between two main highways, some seventy-five accident cases must be treated each month. The hospital even maintains an isolation building in which are seven beds. One or two cases are generally housed there, brought in from the hotels of the neighborhood.

Free work ranges between 45 and 70 per cent. Some of this, however, is billed to the county, and the hospital is reimbursed for costs accruing through service rendered those who have lived two years within its boundaries. Approximately $8,000 or $9,000 of free service is rendered yearly to Lakewood alone. Apart from payments made by the county for free service and small subscriptions raised through the women's auxiliary and other sources, the hospital is self-supporting.

Some three years ago it became apparent that a crisis had been reached in the hospital affairs. Deficits incurred, coupled with other unfavorable factors, threatened to close its doors. At that psychologic moment there arrived on the scene Elizabeth Miller, waving, figuratively speaking, a substantial paintbrush in one hand and carrying in the other a formidable business ledger. She brought with her, too, carefully concealed up her sleeve a bewildering assortment of practical ideas. These she proceeded to take out and put to work as mysteriously as the magician removes rabbits from his hat, with no trickery behind it all, however, but sound hospital knowledge, rare tact and firm courage.

The days of Paul Kimball's Renaissance had begun. Its motto "Make the hospital right for the patient" became recognized through action.

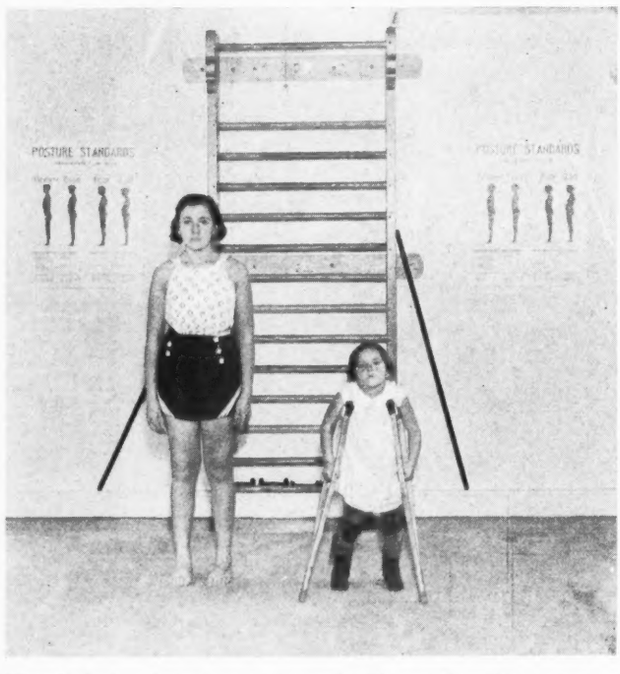
A separate study was made of each department. Rooms were taken in groups as patients could be moved to other parts of the building, and given not merely one coat of paint but two and three. The interest and cooperation of the personnel were sought in meeting the situation. Salaries were cut and each individual was given additional duties to perform. Doubling up became the accepted practice.

While this general reorganization was in process and paint applied as liberally as the impoverished budget permitted, the board was educated to the immediate needs of the institution. The substitution of new equipment for old was brought to the directors' attention, and funds secured for a badly needed operating table and other important items. Constantly was this thought kept before each and every one — "If you send out a satisfied patient, you are assured the best advertising possible to obtain."

Prior to its Renaissance, the total operating expenses of Paul Kimball were close to $105,000 a year. It is now costing $67,900 to run.

Figures for the month of October, 1935, in themselves tell an interesting story. The pay roll, which numbers thirty-eight, totaled $2,771.25 compared with $2,812.16 a year ago. Services rendered amounted to $6,851.71, an increase of $1,041.21 over last year. Cash receipts totaled $4,535.23. Expenses for October were $5,822.68 or $536.96 over the corresponding month last year. Admissions for the month numbered 116 compared with 86 last year.

The hospital is paying its way even to the ex-



Hospital treatment may eventually make the younger child as straight and sturdy as the older one.

tent of reducing its debt of $20,000 by $100 each month. Such strict economies and hand-to-mouth existence do not permit, however, of any expansion of service, which is highly desirable and even essential.

Flexibility among the personnel accounts without question for much of the progress made. The chauffeur — the hospital operates an ambulance within a radius of fifty miles — is also general maintenance man. Three afternoons a week he receives help from one of the porters. On the remaining afternoons the porter relieves in the kitchen.

One of the maids, in addition to taking charge of the private corridor, does the mending in the linen room. The dietitian shares responsibility in the supervision of housekeeping duties with Miss Miller. The superintendent of nurses writes personal histories. One stenographer is employed, and she also has charge of the admitting office.

The night staff comprises a supervisor and five graduate nurses, an orderly, fireman and maid. Ten graduate nurses are employed during the day. In addition to the dietitian, a chef, kitchen man and two tray women constitute the dietary department. Two porters are regularly employed and one maid in addition to the one who serves in the linen room. There is a fireman for day service. In the laundry a man and a woman work on full time and two days a week an extra man or woman is added. One bookkeeper is employed and one technician who handles both x-ray and laboratory.

Duties Definitely Assigned

Each employee receives a work sheet giving exact details regarding his duties. The ambulance man knows, for example, that each Sunday morning he must clean thoroughly the elevator machinery. Also each Sunday the porter knows he is responsible for cleaning the elevator itself. The system is so completely organized that Miss Miller whenever she may happen to look at the clock in her office, can tell precisely where each individual should be found.

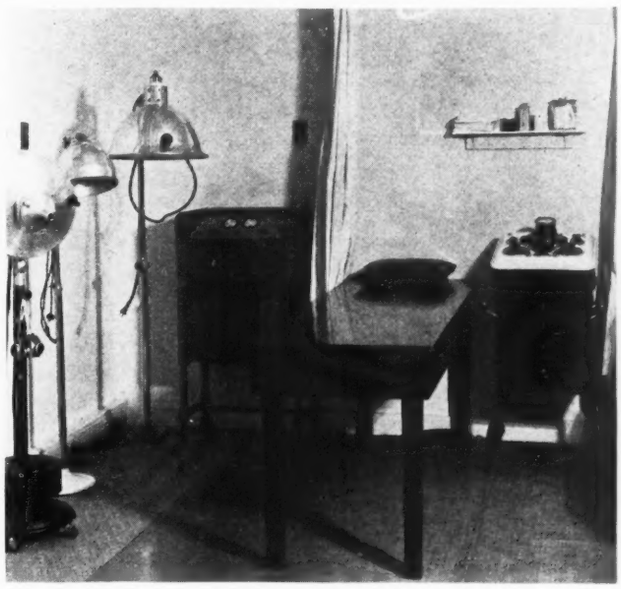
Once a month meetings are held with the nursing staff. On such occasions the work is discussed, and suggestions made regarding adjustments which may promote efficiency and reduce expense.

Close investigations into the operation of every department have likewise revealed opportunities for substantial savings. The pumping system, for example, was carefully surveyed with the result that a new well was installed which has cut down expense $100 a month.

Brightening up the dark places has been the aim from that very day when Miss Miller arrived. With her paint brush all manner of miracles have been performed under the very eyes of the board and the staff.

On the main corridor was a room, small and dark, which had been utilized for a private room. It could never hope to amount to much as a private room, so Miss Miller proceeded to make it into a doctors' lounge or waiting room. After generous applications of paint, a few chairs were placed in it, also freshly painted, and a table with telephone connections. Now the doctors carry on their conversations in privacy rather than in the main public corridor.

Across the street from the hospital is the nurses' home, a cottage which was originally in bad condition. Again the paint brush was put to work. In addition, a room on the main floor, formerly a dilapidated kitchen, was transformed into a comfortable sitting room for the girls with facilities for preparing a light meal. A dark closet adjoining it was ripped out and in its place a modern bathroom installed. Bright colored material was purchased at a few cents a yard which Miss Miller herself proceeded to make into curtains not only for the first floor of the cottage but for the nurses' rooms above as well. These add just the right finishing touch.



A glimpse of one of the treatment rooms.

In the basement of the hospital are other evidences of modernization. Facilities provided for orthopedic work have resulted in remarkable achievements. Space formerly unoccupied is now being prepared for physiotherapy treatment. At one end of the corridor is a room still dark and forbidding which Miss Miller has very much on her mind. It will not be long before that, too, succumbs to a freshening up process which with a new table will assure a modern autopsy room.

The staff of the hospital is headed by Dr. Harold Bell Disbrow, who with two others comprise the executive staff. There are ten on the active staff and five on the associate staff. The close proximity of attending physicians has precluded so far the addition of a resident doctor.

As the period of Renaissance has progressed, renewed interest in the hospital has been evidenced both on the part of board members and by the women's auxiliary as well. Their staunch support of the modernization program has provided added impetus.

The board consists of ten members, one of whom is from the Board of Freeholders and represents the county. Approximately 200 women are enrolled in the women's auxiliary with eleven different units in various towns throughout the county. Through their activities such as tag days and entertainments, the hospital benefits to the extent of $2,000 yearly. Once a month this group meets at the hospital where in a social atmosphere induced by afternoon tea, the ladies learn of hospital problems from one who speaks from personal experience. Such gatherings have already resulted in a new gas range in the kitchen as well as stainless steel tables and sink. Indications point to the acquisition of a new potato peeler in the not distant future, also new linoleum for the floor.

Contact with the community as a whole is provided through invitations extended civic bodies such as the Kiwanis, Rotary Club and the Business and Professional Women's Club, to hold one of their regular yearly programs at the hospital. These are busy occasions for the staff. The dietetic department serves dinner, and the doctors escort the guests through the hospital, explaining the work of the various departments. Incidentally, this has been found to lessen any troubles arising over laboratory and x-ray charges.

Through such methods is the community made to realize the need of the hospital. This work will assume even new importance now that Miss Miller can lay aside her paint brush for longer intervals.

She started this work in the early days which marked the new era for Paul Kimball. Faced with lack of credit from the local tradespeople, it seemed as though the doors must close. So she put on her hat and coat and proceeded to explain before a meeting of the town's merchants just what the problems were and how vital it was to the community that the hospital be kept open. She had no further trouble nor did they suffer, either, because of their faith. Soon afterward Paul Kimball began to pay its bills on time and to assume new importance throughout the countryside. It had become a hospital made right for the patient.

Pointers on Sterilization

Following are a few selected "Don'ts" appearing in a list prepared for the operators of sterilizing units by the *Canadian Hospital:*

Don't sterilize anything else when sterilizing gloves, as the other materials absorb heat, and will increase the time and temperature required for glove sterilization.

Don't sterilize anything else when sterilizing solutions.

Don't place more than one layer of gloves on a tray, for pressure will prevent sterilization of the inner side.

Don't attempt to sterilize vaseline in an autoclave, as it does not sterilize well, and tends to gum up the discharge line screen.

Don't attempt to sterilize anything in closed metal or glass containers, unless they are placed on their sides with the covers loosely attached (so that steam can get in, and air out).

Don't attempt to sterilize basins or their contents unless they stand on edge. (Sitting flat they will be "air clogged.")

Don't place dressings against the back or against the doors of autoclave, else wet dressings will result.

Don't pack drums tightly, or pack sterilizer tightly; pack each successive layer crosswise with each other.

Don't open the dressing sterilizer door for ten or fifteen minutes after sterilization has been completed; simply crack it, that is, release the door from the gasket, until all vapor has escaped. This ensures dry dressings.

Don't permit instruments to rest on a wet towel after removing them from the sterilizer; they will surely rust.

Don't place flat packages in the sterilizer flat side down. Always place them on edge. This greatly improves the opportunity of steam circulation through the bundle.

Safety in the X-Ray Room

Protective measures in the arrangement of x-ray rooms were recommended by the third International Congress of Radiology, which met in Paris. The general recommendations adopted at the congress state that x-ray departments should not be situated below the ground level, and all rooms, including dark rooms, should have adequate window space. The x-ray room should be sufficiently large, and the ceiling should be at least 11 feet high. The floor should be of insulating material, such as wood, rubber or linoleum. The overhead conductors should be not less than 9 feet from the floor. Earthed guards or sheaths should be provided to shield the parts of the high tension system. Sagging high tension wires should be replaced by fixed overhead tubes. X-ray equipment should be enclosed in vaporproof containers if anesthetics are used in conjunction with x-rays.

The x-ray apparatus should be constantly tested for leaks in order to eliminate any stray beam of rays. Films of the noninflammable type are recommended. Precautions should be taken in the use and storage of inflammable films. Large stocks of films should be kept in isolated storerooms in a separate building or on the roof.

Reorganizing a Clinical Laboratory

By MARCUS D. KOGEL, M.D.*
Medical Superintendent, Queens General Hospital, Jamaica, N. Y.

WHEN the clinical laboratory at the Cumberland Hospital, Brooklyn, N. Y., was reorganized under a full-time pathologist, the new director was faced with a difficult task. The quarters provided for the laboratory were small and inadequate. Space was poorly apportioned; the mortuary room was poorly lighted and insufficiently equipped; there was no museum space; there was no place set aside in which to do frozen section work. There was no conference room. The technical personnel were disorganized; there was no clear definition of their duties and their work was haphazard. Laboratory records were poorly kept; tissue sections were discarded after microscopic examination; surgical specimens were received in a fixed condition without clinical data. The interns were not attracted to the laboratory. The morale was at a low ebb.

The first thing done was to set up a scheme of organization. A list of duties was drawn up so that there is now clearly set forth the "special function, act, office and relation" of each person in the department. The general scheme of organization is shown in the accompanying chart.

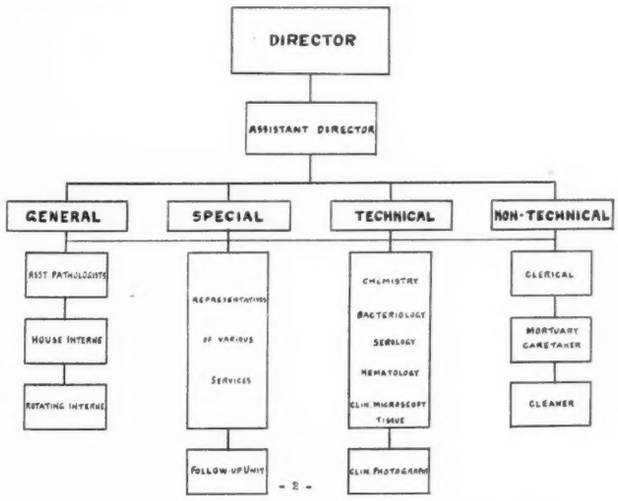
Professional Staff Has Two Divisions

This scheme of organization is deserving of several special comments. The professional staff is divided into two divisions. The general pathology division consists of physicians in practice who are especially interested in pathology and who act as a rotating staff of prosectors, each member being responsible for the complete protocol of the case he autopsies, including clinical, gross and microscopic studies of that case.

The second division is the special pathology division. The assistants in special pathology are chosen because of their interest in pathology and because of their willingness to represent their particular service on the pathology staff. Thus the assistant in surgical pathology is a junior member of the surgical staff and the assistant in medical pathology is a junior member of the medical staff. These contact men, being fully acquainted with the clinical and pathologic aspects of their cases, are well qualified to indicate how the laboratory might be of aid in the solution of their various problems. This has resulted in a more intimate contact and a better understanding between the pathologist and clinician.

Included in the set-up is a follow-up unit which as far as I know is an entirely new departure for a clinical laboratory. A member of the social service department as well as a young physician sufficiently interested in pathology have been drafted for the purpose of following up, observing and recording the progress of the discharged patients who present interesting problems in pathologic diagnosis.

Each assistant in general pathology meets with the director at a specified time each week to discuss the case or cases on which he has been working during the past week. Before the protocol is actually completed and put into final form an



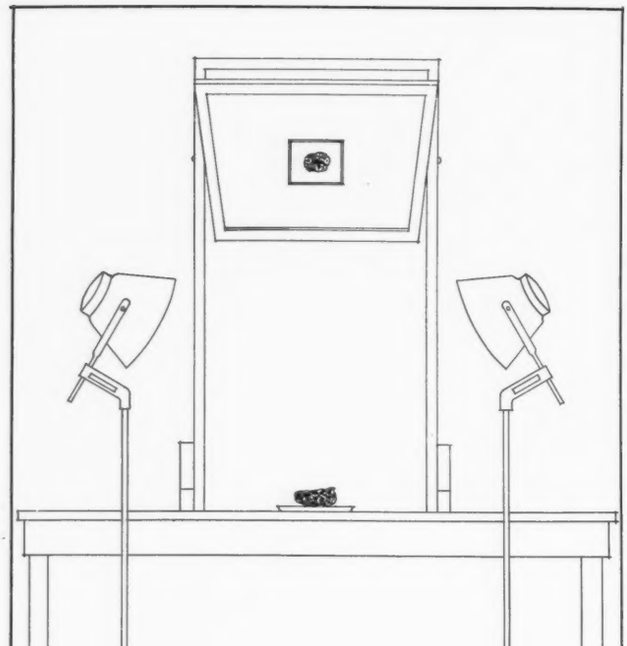
Organization chart for laboratory personnel.

opportunity is given the men to present their cases before the whole pathologic staff at a Wednesday morning "Show Me" conference. These conferences are interesting and are invaluable to the young pathologist. Fifteen minutes are allowed in which to present the salient clinical features, gross specimens and microscopic findings. Nothing may be mentioned that cannot be demonstrated. These meetings train the men to

*The author was formerly medical superintendent of Cumberland Hospital, Brooklyn, N. Y.

present cases properly before staff conferences. The young assistant secures instruction in basic general pathology and learns to speak the language of the pathologist.

The duties assigned the intern may be of interest to the hospital superintendent. The plan of organization calls for two interns — a so-called senior or house on pathology who serves for one



A homemade epidiascope.

year and a junior or rotating intern whose two months' service on pathology is part of a two-year general rotating internship. The duties of the senior intern may be outlined as follows:

1. Administrative. Same as house intern on other services (schedule work and time off — assign work to junior).

2. Autopsies. Assist at and perform under supervision (gross and microscopic dictation to completion of protocol). (a) Preserve specimens; (b) supervise morgue equipment; (c) abstract case history on autopsy; (d) instruct routine to subordinates.

3. Surgical tissues. (a) Assist in disposal of (receipt - record - describe - preserve - photograph - demonstrate); (b) animal inoculation and examination of; (c) assist in frozen sections (equipment — presence at operation — disposal of slide — record of diagnosis).

4. Blood cultures. Collect blood, prepare and assist bacteriologist in examination of.

5. Clinico-pathological tests. (a) Emergency blood chemistry-sugar-urea-CO_2; (b) emergency bacteriology-spinal fluid-smears of discharges-sputum typing; (c) blood grouping and cross-matching (responsible for stock serum); (d) special function tests — iodeikon-bromsulphalein-P. S. P. — glucose tolerance test.

6. Blood transfusions. Does blood grouping and cross matching of patient and donor; physical examination of donor at time of cross matching.

7. Venopunctures. (a) On special requests in difficult cases; (b) special therapeutic measures; prepare solutions and administer intravenous medication on special request to department; (c) collect blood for routine chemistry, serology and cultures.

8. Special divisions of pathology. Assist clinical associates (Example: (a) Blood studies performed by hematology department — A. Z. test by gynecologic department; (b) secure clinical data on interesting ward cases — special emphasis on laboratory aid in diagnosis).

9. Assists in preparation for lectures, society meetings and pathology conferences.

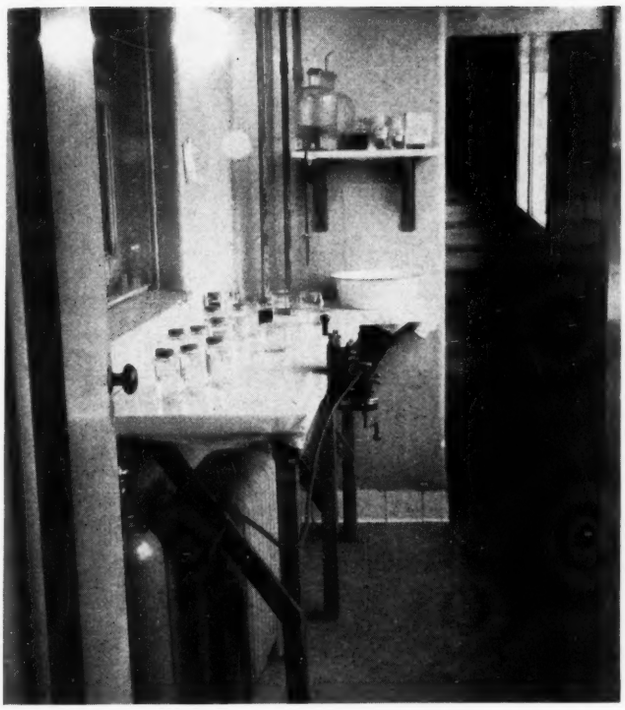
10. Engage and assist in publication and research work.

Interns' Work Is Graded

The junior rotating intern assists the senior in the performance of all his duties and is responsible for the completion of work assigned to him by the senior intern. He performs emergency tests as indicated under the duties of the senior intern. The rotating pathology intern is required to acquaint himself with and be able to perform reliably at least fifty-four different examinations on the completion of his laboratory service. These are tests in or of blood chemistry, blood grouping, hematology, bacteriology, urine, spinal fluid, gastric and duodenal contents, stool, body cavity fluids, sputum and three special tests — guinea pig inoculation, Friedman test on rabbits, and P. S. P. test. The work of the interns is graded by the director and a report is sent monthly to the medical superintendent.

The staff organization satisfactorily completed, attention was given to the physical reorganization. In the rearrangement of the quarters, the guiding principle was to make the laboratory more accessible and inviting to the clinician with the ultimate aim of promoting a better understanding. The director's office was moved and at private expense, city money being scarce, it was made as attractive as possible. All items of interest to the clinician such as surgical tissues and bacteriologic specimens were made easily accessible for demonstration to the visitor.

The mortuary was converted from a bare,



Frozen section space in a hospital laboratory.

poorly lighted, insufficiently equipped space into a dignified postmortem room. A slate slab which had been used for an autopsy table was removed and a discarded autopsy table, salvaged from the junk heap of another hospital, was repaired and installed by the hospital help. An old instrument cabinet was repaired and painted, fitted out with the instruments used by the autopsy surgeon and given its place in the autopsy room.

The hospital electrician installed a battery of lights so that the room has proper illumination and the operator has sufficient light to do the necessary gross tissue examinations. Facilities were provided for incineration. A special copper tank was built for the preservation of organs. Equipment was provided for bacteriologic, chemical and other necessary studies of tissue and body fluids in the course of the usual postmortem examination. These and many other changes facilitate the complete and careful performance of autopsies and they were accomplished with a minimum of expense to the hospital.

Lack of space made it impossible to find a separate room for performing frozen sections on biopsy specimens. There was a small space, however, formed by the widening of an unfrequented corridor immediately behind the main operating room and adjoining the surgical amphitheater and this space was chosen. A large solid wooden door that had been lying in the carpenter shop for years was converted into a work table (lumber was not available at the time).

By utilizing an old frozen section microtome and improvising the other materials for frozen section work, such as a water siphon bottle and basin to take the place of a sink, an alcohol lamp to serve the purpose of a gas flame, as well as several other contrivances to serve as substitutes for more up-to-date equipment, it was made possible to convert an unused space into an important workshop. This arrangement is serving its purpose splendidly.

The overcrowded conditions of the hospital and the utilization of every bit of available space left us entirely without a room for the pathologic and other sectional conferences. This difficulty was overcome after a few structural changes were made by the carpenter and electrician on the stage of the gymnasium. The stage was converted into a fairly satisfactory lecture room. As a substitute for an epidiascope, a practically costless apparatus was improvised. A large mirror was purchased in a secondhand store and mounted by the carpenter between two uprights. This outfit is made to stand on a table. Two floor lamps containing 500-watt lights play on the specimen that is being demonstrated on the table beneath the mirror, and by tilting the mirror to the proper angle, the

DEPARTMENT OF HOSPITALS
CUMBERLAND HOSPITAL
CLINICO-PATHOLOGICAL RECORD

HOSP. NO. NAME: AGE: SERVICE: DATE:
SPECIMEN:
CLINICAL DATA - C.C. AND P.I.
P.H. AND F.H.
P.I.
LABORATORY DATA:
OPERATIVE FINDINGS:
CLINICAL DIAGNOSIS:
SIGNED DR.

Clinical abstracts regarding specimens from the operating room are written by the surgical intern on 5 by 8-inch cards. The cards are numbered to correspond with the microscopic slides and gross specimens. The front and back of one of the cards are shown here.

PATHOLOGY REPORT

MACROSCOPIC:
MICROSCOPIC:
PATHOLOGICAL DIAGNOSIS:
SLIDE NO. MUSEUM NO. REPORTED BY:
REMARKS:

demonstrator is able to give the audience a clear view of his specimen in the mirror.

Fortunately, we possess a micro-projector, an invaluable little apparatus. A satisfactory screen was constructed by using ordinary surgical oiled silk as the screen material and stretching it taut in a square frame made by the carpenter. Thus, by the exercise of a little ingenuity, the hospital was saved hundreds of dollars and a fairly well equipped conference room was provided.

The problem of the museum was solved by converting an unused kitchen to this purpose. Shelves were built by the carpenter and although the room is small it will serve our present needs. It provides sufficient space for 300 specimens. These specimens are being systematically arranged according to the Maude Abbott classification, with a complete organ and diagnosis card index for ready use at all times.

A clinical photography unit as a part of the clinical laboratory is now being contemplated. Its usefulness to a modern hospital cannot be too highly stressed. Scarcely a day goes by without the need for a gross or photomicrographic record of some specimen. This unit is also expected to function in making photographs of interesting lesions before and after treatment, for inclusion in the clinical record of the case.

To do their work efficiently, the volunteer members of the general pathology division had to be provided with laboratory work space which they could call their own. This was done by assigning a separate microscope locker and a minimum amount of table space to each man. A name plate conspicuously placed identifies the space. This arrangement has its beneficial effect in creating greater interest among the volunteer workers and giving them the feeling that they are actually a part of the organization.

Handling Specimens

The work of the tissue division has been greatly improved. Surgical specimens are collected from the operating room twice daily and examined in the fresh state. Each specimen is accompanied by a regular form card (5 by 8 inches) as shown in the accompanying diagrams. The card is numbered to correspond with the microscopic slide and gross specimens. The clinical abstract appearing on the card is written by the surgical intern responsible for the case. No report is rendered by the pathologist to the ward unless and until the clinical facts of the case are on the card.

Postmortem examinations are performed by the assistants on the general pathology division under the watchful eye of the director who gives his personal attention to every detail of the examination. An average of approximately fifteen tissue sections are taken from the autopsy material of each postmortem. Special staining is done when necessary and the interesting specimens are mounted for inclusion in the museum. Tissue sections are no longer thrown away but filed in a simple way so that they are available at a moment's notice. The autopsy protocols have been bound in book form, each volume containing one hundred postmortem records with a diagnosis index of the cases contained in each volume.

Work Is Developing Fast

The enthusiasm created among the members of the hospital staff, through the medium of conferences and demonstrations has resulted in increased demands on the laboratory. The bacteriologic and serologic divisions especially have been taxed to the utmost. A bacteriophage unit in the bacteriology department has been organized. The actual preparation of specific phages has not yet been accomplished because of the lack of necessary equipment. The unit, however, is investigating the methods employed in other institutions and will be ready to function when equipment is secured. Progress has been made in pneumococcus typing, meningococcus typing, the culturing of fungi and tubercle bacilli.

The laboratory keeps abreast of recent advances and new laboratory procedures which are of value are encouraged. In special cases in which it is necessary to perform tests, for which the department is not equipped, contact is made with the laboratories where such tests are performed and the results thus obtained made available to the members of our staff. All this is translated into increased service to the patient.

The educational program of the clinical laboratory constitutes a prominent part of its activities. It includes:

1. Clinical-pathological conference in surgery bi-weekly.
2. Clinical-pathological conference in medicine monthly.
3. Clinical-pathological conference in pediatrics monthly.
4. Clinical-pathological conference in obstetrics monthly.
5. Clinical-pathological conference in malignant diseases weekly.
6. Quarterly surgical pathological conference for all surgical services.
7. Quarterly general staff conferences.

At these conferences, the autopsy findings of the cases from the respective services are presented in detail with an attempt at clinical pathologic correlation.

8. "Show Me" conference weekly. These meetings are for those actively engaged in the routine performance of autopsies and examination of surgical tissues.

9. Hematology conference weekly. This includes a review of the blood studies performed during the week with special emphasis on instructing the pathology intern in hematologic methods and interpretation.

10. Technicians' conference monthly. These meetings are for the purpose of informing the technicians of recent progress in laboratory methods.

11. Intra-departmental pathology conferences monthly. This meeting is exclusively for the members of the department of pathology. The scientific program of the meeting includes a summary of the results of investigative work performed by the department. The meeting is concluded with a presentation by the intern in pathology of important and interesting gross and microscopic specimens which have accumulated during the preceding month.

12. Lectures to nurses.

13. Lectures to interns.

The budget does not provide special funds for research but this does not impede fertile minds and several research projects are already in progress. The new department has created a feeling of enthusiasm throughout the entire staff. The percentage of autopsies in 1934 was 48.76 (exclusive of medical examiners cases and stillbirths), the highest we have ever attained. Interns are anxious for the opportunity of working in the laboratory. Conferences are well attended. The laboratory has regained its prestige.

A Friendly Appeal—A Friendly Response

By MRS. W. H. MOODY

Secretary, Subscription Committee, Saratoga Hospital, Saratoga Springs, N. Y.

SARATOGA Hospital, Saratoga Springs, N. Y., has successfully solved the problem of meeting its current expense deficit by the organization of a subscription committee. Through a series of personal letters the committee raises from $7,500 to $10,000 yearly at a cost of collection of about 10 per cent. The method may be interesting to other unendowed, public hospitals, as it is equally applicable to any community, its chief requirement being a persuasive letter writer.

We have a card system of over 3,000 names, about 1,500 giving from $5 to $200 and the other 1,500 giving $1 or $2. Such a list may be compiled originally from the community's directory, from the telephone book or from lists turned in by the members of the hospital board. All business houses, all clubs and similar organizations in the territory are included. The cards are checked before the campaign begins, useless letters being eliminated and new possibilities added.

Ours is a summer resort city, and summer and autumn are the most affluent periods. We begin our work about June first. For three months the subscription committee employs two typists. Last year we sent out nearly 5,000 letters. An informal and friendly letter is first written to the group whose contributions are from $5 to $200. Each letter is typed separately, as we do not find that printed form letters get the same response. The letters are signed by the typist as secretary of the subscription committee, and beneath the signature the names of the members of the subscription committee are typed. With these letters, a return stamped envelope is enclosed. The last work of the typists is a short, pleasant reminder to those of this group who have not responded to the first letter.

In the period between the sending of the letters to the first group, some 1,500 letters are sent to the friends who give annually $1 or $2. A return envelope is enclosed in these letters also, the address to which the letter is sent being typed on the back of the return envelope, as many of those who send a bill forget to include their name. No second letter is sent to this list. Our list is about two-thirds local, and one-third in the surrounding country.

Newspaper publicity, stories regarding the hospital and advertising are used frequently during the three months of the campaign. This is also done by the subscription committee. In addition to our other publicity, last summer we used a large window card the last week of the campaign, placing it in shop windows and filling stations in the territory covered by our letters, using the same copy for a page advertisement in the local paper the day the card appeared in the windows.

Success depends on appealing, friendly letters, which make the recipient feel that the last donation was appreciated and that the subscription committee feels that the donor wants the opportunity to help "his" hospital again. Receipts are sent for all contributions, with a special "thank you" letter for gifts over $10, although frequently the soiled $1 bill enclosed in the letter signed with a queer foreign name has meant more self-sacrifice than the $200 check. We have many subscribers who give yearly, some who give alternate years, but any card is worth trying as the results are surprising. Those who are well able to give sometimes neglect to do so and often the person one feels ought not to send this year, contributes the usual amount.

Saratoga Springs has a population of about 1,400 and the Saratoga Hospital serves a surrounding territory containing several small industrial towns and an agricultural population. Both towns and farmers have been financially distressed these last years. Nevertheless, the subscription committee has raised annually nearly 50 per cent more than was expected in the hospital budget, the receipts this year totaling $6,317.25, which is a decided asset to the budget of a 100-bed hospital.

Someone Has Asked—

How Should Cutting Instruments Be Sterilized?

This inquiry comes to The MODERN HOSPITAL from the superintendent of a Midwest institution of fifty beds. The physicians on the staff of this hospital demand that all cutting instruments be chemically sterilized. Information is requested as to which of the following antiseptics should be chosen for this purpose — phenol, compound solution of cresol or alcohol in 70 or 90 per cent strength.

Most institutions believe that scalpels and other cutting instruments should be sterilized chemically and not by boiling. In some institutions phenol or compound solution of cresol in high strength is employed. It is, however, more often considered safe and effective to employ 70 per cent alcohol for this purpose. The immersion of scalpels in 70 per cent alcohol for twenty minutes will effect sterilization without injuring the cutting edge.

Phenol and compound solution of cresol are of course capable of destroying organisms but it is thought that their corrosive action affects the cutting edge of delicate instruments, such as cataract knives or bistouries. These chemicals also produce serious burns if they are carelessly handled by the operating room personnel. It would appear, therefore, that 70 per cent alcohol is not only efficient but is also highly convenient and economical for sterilizing cutting instruments.

May Specimens Be Retained at Autopsy for Later Examination?

This question, submitted by the director of a hospital in the East, is rather unusual. Although it is not often discussed, it nevertheless constitutes an important problem in almost every hospital in this country where autopsy work is done.

Few will deny that postmortem examinations cannot or should not be performed without the written permission of the nearest relative of the deceased. A body in the last analysis belongs to the person or persons who propose to defray the expense of its burial. Hence, hospitals, almost without exception, require the signing of a carefully worded legal autopsy permission. Only a few institutions include in their postmortem forms a request for permission to remove and retain organs. Nevertheless almost all hospitals make a practice of doing this.

If only sufficient tissue for histologic examination were retained at autopsy, much of the teaching value of the postmortem would be lost. The clinical-pathologic conferences of the hospital depend almost entirely upon the comparison of postmortem findings as demonstrated by the pathologist with the recorded observations of the clinician. Yet there is but little doubt that the hospital has no legal right to retain pathologic specimens unless a specific permission so to do has been granted by a responsible person.

That so little difficulty has arisen on account of this practice is a fortunate circumstance. Hospital postmortem examination percentages are likely to decline sharply whenever autopsy policies and technique begin to be criticized by the public or the press. It would seem a wise step, therefore, for all institutions to consider seriously the elements of danger inherent in the practice of retaining tissues at the time of autopsy. The postmortem permission form could well include authority for the retention of such tissues for examination and study as are deemed necessary by the pathologist.

What Obligation Has the General Hospital in Relief Cases?

No conscientious hospital executive relishes refusing treatment to any patient. Nevertheless, there are many who believe that relief organizations, probably through no fault of their own, are inclined to impose upon the hospital's generosity.

It is not uncommon for a patient to present a relief form to the hospital when requesting admission. When this is granted, the public charity supporting such a patient is usually spared the payment of any monies to the individual during his period of hospitalization, and the institution is required not only to furnish housing and food but also to meet the cost of medical care. Such an arrangement appears wholly unfair to the hospital.

Governmental relief agencies have up to the present refused to meet the cost of hospitalization of the indigent. Furthermore, whenever such patients are accepted for treatment, the payment of relief funds ceases. If there is a public hospital in the community, the executive of the voluntary hospital is perfectly justified, in the opinion of The MODERN HOSPITAL, in referring these patients thereto. A firm stand of this sort may eventually bring relief groups to the realization of the continued and wholly inexcusable injustice imposed by government agencies upon the general hospital.

Is the X-Ray Director a Partner in the Conduct of the Hospital?

The superintendent who asked this question is confronted by a situation not altogether unique. The director of the roentgen ray department in this institution receives a percentage of the gross income of the department. He requests since he is vitally interested in the income received from the patients whom he examines and treats that the superintendent should submit to him monthly an itemized statement of the financial income from his department. This director also insists that no rebate should be made on an x-ray bill without his knowledge and consent.

Engaging an x-ray director on a percentage basis is not universally considered good practice. On the other hand, when this is done the director of the hospital is, in a measure, duty bound to furnish the roentgenologist with information as to how his monthly honorarium is computed. If objection is made to the total hospital bill any rebates conceded should be shared by all concerned. If, however, the x-ray bill alone is the subject of dispute this department should bear such rebates.

To a certain degree when the above arrangement exists the hospital and the x-ray director are partners and there should be mutual understanding as to the methods employed in compiling the financial monthly statement of this department. Such disputes would never arise if the x-ray director were a full-time employee on an annual salary.

If you have any questions to ask, the Editor will be glad to discuss them in a forthcoming issue

Playing with toys and games is a happy way to give exercise that will strengthen weak muscles and stimulate interest.

A Curative Workshop and How It Aids Orthopedic Patients

By BERTHA MADISON, R.N.

Junior League Curative Workshop, Milwaukee

THE Junior League Curative Workshop of Milwaukee is a nonprofit organization for the treatment, at cost, of industrial accident and private patients, both adults and children. The treatment of other patients is made possible by the Milwaukee County Community Fund.

The workshop was established in 1919 by the Milwaukee Junior League. After the community realized the importance of the work being done, the workshop was taken over as a community fund organization. The junior league members still take an active interest in the welfare of the workshop. New equipment is purchased by them and their members give regular volunteer service to supplement the paid staff. The transportation of patients is also one of the important contributions of the junior league.

Patients are referred to the workshop by private physicians, the Milwaukee Children's Hospital and the Milwaukee County Dispensary. The patients report at regular intervals to the physician in charge. A detailed written report of progress is mailed to him. Physicians are encouraged to visit the shop and observe the treatments given, in order that the patient may receive the maximum results obtainable for his particular disability. Adults are treated in the morning and the children in the afternoon.

The staff is composed of a director, three trained occupational therapists and three trained physical therapists and two secretaries. In addition to the regular staff, the occupational therapy students from Milwaukee-Downer College report to the shop for one month of their training.

The home service department became a branch

These patients are playing crokinole, a game used to increase the strength of the finger extensors.

of the Junior League Curative Workshop in 1932. This department is equipped to assist the physician by providing occupational therapy for any type of physical or mental condition which can be helped to a more normal condition through this form of treatment. The work is in charge of a trained occupational therapist who has a car at her disposal.

Many of the children have speech defects and are placed under the supervision of a trained speech teacher who reports to the workshop for two half-days a week.

The shop is located on a street car line in a building near the downtown district. Originally the building was a dwelling, later it became an office building, now the first floor and part of the basement are equipped for occupational and physical therapy.

Physical Therapy Equipment

The physical therapy equipment includes a treatment tank, 6 by 10 feet long and 4 feet deep, a Hubbard tub, a whirlpool tub for arms and one for feet, an arm bath of paraffin, an ultraviolet lamp, a diathermy machine, infra-red and radiant bakers and cameras for movies and stills.

Bicycle and treadle saws, large and small looms, woodworking tools, a rowing machine, walking ramp, graduated steps, shoulder wheel, wrist wheel and pool table, are some of the means by which active exercise is obtained at the same time that the patient is interested in making something to give to the family at home. The children have fascinating toys and games which give the needed exercise and stimulate the interest.

The work is varied in scope. In 1934, 269 adults were treated, 140 were insurance cases, 55 private, and 74 nonpay. Our daily average of treatments of adults was 18.8. A total of 228 children were treated; 68 of these paid for treatment and 160 were treated without charge. The daily average of treatments of children was 13.6. In the home service department 76 patients were treated. Industrial injuries, poliomyelitis, cerebral palsy and faulty posture comprised the majority of the total number of cases treated. During last year 144 different physicians used the facilities which we offer for the treatment of their patients.

In addition to the usual back examination of the faulty posture cases, a photograph is taken at the time of entrance and at three to six-month intervals thereafter. Detailed muscle charts are kept for the patients who have had poliomyelitis or Erb's palsy. Neurologic charts are kept for patients with cerebral palsy. All records are always available to the physician in charge of the case. Many of the children are so badly handicapped that street cars are of no help in reaching the workshop. The junior league volunteers furnish private cars for these children.

Many of the children are undernourished and some of them tired and hungry after riding long distances. A volunteer makes and serves cocoa or milk and crackers to all of the children each day.

Work and recreation are normal activities and the person who is cut off from these through accident or disease tends to deviate from a normal, healthy point of view.

Physical function is more rapidly regained and the patient is more cooperative and contented when normal activities are used as exercise.

The patient who has had this form of treatment does not lose his work habits during prolonged convalescence and he is more easily readjusted to work.

Insurance companies find these methods of treatment an economy, shortening the duration of disability and decreasing the amount of the final settlement.

New Medication Methods and When to Adopt Them*

THE therapeutic pendulum swings in a wide arc. Gaining momentum a new or dramatic method of treatment is likely to have undue prominence for a time only to find later its proper place and value.

Let us glance for a moment at the methods used in the hospital for the administration of medicines, including drugs and the ingestion or injection of salt solution, glucose and other remedies.

Medicines may of course be administered by the oral route. The rapidity and certainty of their effect must depend upon their absorption in the gastro-intestinal tract and even upon so basic a fact as the ability of the stomach to retain them. When the superintendent of a hospital, therefore, is requested to purchase drugs for hypodermic or intravenous use he may be satisfied, even though their expense be greater, by the knowledge that often such medicines cannot be effectively administered by mouth and that in certain conditions no other medication but that given by the hypodermic route is possible. He may observe a request for capsules or tablets to be enteric coated, which implies that the physician is desirous of avoiding any action of the gastric juice upon these remedies so that they may pass through the stomach before absorption takes place.

Should Inspect Variety of Preparations

The patient who is very ill may require a more prompt therapeutic action and again ampoule drugs or those sufficiently soluble to be employed by the hypodermic needle are necessary. Digitalis, for example, is frequently given by mouth and this is one of the few essential drugs that should be present in quantity and of high purity in the hospital drug store. And yet the institutional executive may well inspect the number of varieties of digitalis which he is requested to buy. From a practical standpoint, money can be saved the hospital by the purchase of a potent capsule or tablet and a fresh and active tincture for mouth use, and an ampoule for intravenous or subcutaneous injection.

It would be a wise step for all those who read this statement to inquire from their druggists as to the number of digitalis preparations that are being employed, particularly in the wards. This statement may also apply to various other types of medication such as the mercurials, the arsenicals employed in the treatment of lues and the various and sundry stomachics, tonics and sedatives purchased by the hospital.

Those who hold the hospital's purse-strings should be alert to the possibilities of new treatment methods but should not rush blindly into schemes that may be without scientific basis

Medicines may also be administered by rectum. The term "Murphy drip" refers to a practice originated by a famous surgeon of the Midwest which is exceedingly common in hospitals. This term refers to the administration of a salt, sugar or alkaline solution, drop by drop into the rectum. Notwithstanding the fact that there has arisen from time to time a doubt as to the rapidity or even presence of absorption, particularly when an endeavor is made to nourish a patient in this manner, yet the lower bowel surely offers an avenue of medication which cannot be lightly dismissed.

Medicines may be administered also through the skin. The ancient yet reliable practice of treating luetics by the rubbing in of mercury ointment is as effective today as it was generations ago. Of course the fallacy of statements made by faddists that bodies may be nourished and emaciated patients fattened by rubbing cocoa butter or other fatty preparations into the skin should be evident to all. It would be as reasonable to expect a horse to be nourished by rubbing oats on his skin. Local skin conditions obviously may be treated by the application of antiseptic healing remedies. The dermatologic formulary of the hospital usually contains many useful prescriptions for the administration of drugs in this manner.

*Practical Administrative Problems Series.

Of greater interest is the injection of fluids or remedies into or under the skin. The hypodermic administration of remedies is one of the commonest of hospital practices. Hypodermoclysis is the injection of saline or other solutions more or less deeply into bodily tissues. As common as is the use of the hypodermic needle in the hospital, nevertheless an observer need not travel far before discovering atrocious slips in aseptic technique in this simple procedure.

Equipment for Hypodermic Tray

The hypodermic tray of the average hospital is in a great majority of instances well equipped for the purpose for which it exists. Nevertheless simple errors are still rather common, such as the omission of a bottle with a puncturable top containing sterile water with which the irritating alcohol may be removed from the syringe before it is used or so that alcohol may not be brought in contact with a biologic remedy and destroy its efficiency. Remedies are more and more being furnished in containers with puncturable tops, although there are many who believe that there is less likelihood of infection in the use of the more expensive individual ampoules. The administration of various serums and vaccines such as those intended for the prevention or relief of hay fever, furuncles and the like is a common practice. Each hospital, of course, should supply its nursing force with a high grade needle and syringe and throw every safeguard about this most common method of administering drugs.

Hypodermoclysis is also a common method of treatment in the hospital wards and rooms. Here the physician endeavors to administer large amounts of fluid with a minimum of medication. Salt solution of the same density as the serum of the blood or salt and sugar solutions, the latter in low concentration, are administered in this fashion for the relief of hemorrhage, toxemia, the filling of the blood vessels and the maintenance of blood pressure in shock or in instances where the patient's stomach is not retentive. In order to avoid irritation of the tissues, as has been intimated, sugar solutions are not commonly employed in high concentration.

The tray system of the average good hospital contains carefully prepared hypodermoclysis setups which include basins, applicators, sponges, disinfecting solutions, needles, usually of eighteen gauge, a proper burette or bottle as well as sterile gowns, gloves and sheets for the use of the doctor and flasks of the sterile solution to be injected. In some institutions members of the nursing staff are permitted to insert and remove hypodermoclysis needles. Most hospitals, particularly those with resident staffs, do not consider this practice advisable. The danger of infection in the injection of large quantities of liquids beneath the skin is always present. In addition to the careful sterilization of the site selected, usually the anterior surfaces of the thighs or under the breasts, the physician often insists that the needles be inserted through a sterile pad of gauze, thus reducing the possibility of placing live organisms beneath the skin.

Some hospitals contain in their technique books a recommendation that a very dilute solution of novocaine be employed in the solution to lessen the patient's discomfort. It must be surprising to the uninformed to realize that large quantities of fluid may thus be administered to the patient, as much as ten liters or quarts having been given in the course of twenty-four hours. One advantage of the administration of fluid in this manner is that the tissues acting as a reservoir supply liquids slowly to the blood stream and hence it is not likely that a failing heart will be thus overburdened.

It is surprising to note the highly varied methods employed in the preparation and administration of fluids by the hypodermic or intravenous route throughout the hospital field. Here one observes the crudest and most unscientific technique being followed and there one sees evidence of the most detailed attention having been given to this important matter. More and more are hospitals employing the same flask in which the solution is sterilized as a reservoir from which it is administered, thus avoiding the dangerous transfer at the bedside of these solutions from one container to another.

Techniques in Intravenous Injections

In addition, splendid advances have been made in the past few years in the employment of a number of flasks properly connected with rubber tubing for suction as well as for the injection of fluids. Wagensteen and others have devised interesting and effective set-ups whereby toxic fluids may be abstracted from the gastro-intestinal tract in the presence of a peritonitis, while at the same time salt or glucose solutions are being administered by rectum or under the skin. The use of three or more flasks supported on brackets attached at various levels on a clothes tree or other upright and connected by means of a rubber tubing offers a definite advance in the practical treatment of many surgical and medical cases.

Executives who do not have such equipment in their institutions, should learn the details of this method and supply the materials needed for the use of their visiting staffs. It is simple, inexpen-

sive, any hospital can assemble its own outfit, and above all, it is highly effective.

The intravenous route for administering medication is one commonly employed. The puncture of a vein is simple and requires but little skill. When the treatment of syphilis by the administration of arsphenamine first came into common use, the physician fearful of the irritating effects of this remedy should it escape into the tissues was inclined to dissect out the vein to make certain that the needle was properly placed therein. With the development of skill on the part of the members of the hospital resident staff particularly, one rarely observes the incision of tissues for the administration of drugs. An exception to this statement exists when fluids are to be administered to a patient by the drip method over a matter of several days. Here a superficial vein is usually opened and a blunt cannula with a collar is inserted and a ligature is properly placed to hold it firmly in position.

Widespread Uses of Glucose

Familiarity with the administration of drugs by the venous route is likely to breed contempt for its dangers. Nevertheless in consideration of the fact that every sort of agent is injected into the vein at one time or another it is surprising how rarely one observes ill effects resulting therefrom. Not only are drugs injected for distinctly therapeutic reasons but frequently the venous route is employed for the administration of diagnostic agents such as those employed for the x-ray visualization of the gall bladder and the kidney. The venous route, therefore, is most frequently used in the administration of medicines, the injection of sugar and salt solutions, in the emergency treatment of heart failure and in the genito-urinary clinic in the treatment of lues.

The superintendent who closely scans his monthly expenditure sheet is likely to be surprised by the amount of money necessary for the purchase of glucose solution. He rightfully may ask whether the injection of sugar is wholly a fad or whether there is any scientific reason for the great increase in the use of this remedy. Glucose is employed to supply food and to combat acidosis. This condition results when for any reason food is not ingested or sugar is not broken up into its simpler parts. All foods except alcohol yield fatty acids and glucose. The diabetic becomes unconscious when fatty acids accumulate. It has been tersely stated that fatty acids burn in the flame or glucose. Hence in instances where starvation exists or where the body is unable to utilize the sugar which reaches its blood stream, glucose by vein often set aflame by the match called insulin offers life-saving possibilities to the patient.

The body also must have the liquids of its blood maintained at a proper level and hence the necessity in certain states of bodily poisoning for the injection of large quantities of salt solution of the same consistency as that of the blood itself. So it may be said to the doubting superintendent that the widespread use of glucose has its scientific basis and that medical staffs who are wide-awake to its possibilities require large quantities.

The outfit necessary for intravenous administration of such fluids is identical with that described earlier. The hospital superintendent should not stint in supplying an effective and modern equipment for this purpose. Needles should be of the best, some practical method of maintaining the temperature of the solution should be adopted and the transfer, particularly of solutions, from the reservoir in which they are sterilized to burettes or graduated containers should be obviated.

In most large hospitals it has been found practical to set up a distinct department for the preparation of these solutions. Here one should find the best of sterilizing equipment, the highest degree of sterility and the finest of glassware. A system for the delivery of these solutions to the various hospital departments should be well worked out. The labeling of flasks is of the greatest importance. In one instance an error was made and distilled water was injected instead of salt solution. The patient lost his life through gross carelessness for which there could be little excuse. Some hospitals have so refined their technique that they prepare glucose solutions successfully on a large scale and have found that they were able to economize thereby.

Check-Up on Reactions to Injections

A most distressing occurrence in hospital work is the reaction which sometimes follows the intravenous injection of fluids. The picture of a high fever, chills and gastro-intestinal upsets often appears most alarming. The superintendent should spare no effort in learning the cause of these reactions. Such unfortunate occurrences may result from improper technique, poor filter paper, improperly cleansed tubing and needles, solutions of too low temperature and probably from the incorrect preparation of new tubing. All new tubing should be boiled in sodium hydroxide solution to remove impurities. The glassware, filter paper and the tubing should be of the highest grade. When reactions occur, a record should be kept of the type of solution employed, the time taken for its injection and other details.

Editorials

Christmastide

A HOSPITAL is not the place of choice to spend any holiday. But disease, on the other hand, is no respecter of time or person. The place for its treatment, however, may be a matter of selection.

To those thousands who unfortunately will perforce awake on Christmas morning in a hospital bed, the day may still bring much of joy — of at least temporary surcease from physical pain and mental distress. Of all the days of the year the hospital at this time has placed upon it the most unusual obligation. It is that of ministering in a special way to souls to whom come flooding remembrances of other Christmases spent amidst happier surroundings.

How splendid is the willingness of interns and nurses absent from home for the first time perhaps to assist in making others happy. Gay trees, stockings in the children's ward, a real Santa Claus, bright menus and above all a spirit of kindliness, of cheer, pervading all — these are the means of making Yuletide in the hospital not only endurable but a joyous day. All praise to those who forego their own pleasures — who gladly desert home circles to give of themselves to bring happiness to others.

Greater Aid to Hospital Purchasers

THE new fourteenth edition of The HOSPITAL YEARBOOK is rapidly nearing completion and will be available for distribution on or about January 1. The cordial response that greeted the thirteenth edition has encouraged the editors to carry forward and expand the type of contents of that book.

The thirteenth edition thoroughly covered the planning and construction of hospitals. This year attention is centered on hospital purchasing. A series of check lists has been developed by a group of outstanding hospital administrators collaborating, through The MODERN HOSPITAL office, with the best technical men among American manufacturers and dealers.

These check lists present in orderly fashion the principal points that should be considered in the purchase of various important types of hospital equipment and supplies. While it was manifestly impossible this year to develop such purchasing information for all of the 5,000 or more products used currently by hospitals, a creditable start has been made. It is proposed to continue and extend this material from year to year, revising it so as to keep abreast of technological improvements and keeping it constantly under the guidance of informed and disinterested hospital executives. In the forthcoming edition approximately fifty different types of supplies and equipment are covered. These include such types as acoustical materials, ambulances, thermometers, operating room lights, floorings and silverware, to name only a few.

Supplementing these check lists, a few of the outstanding articles from the thirteenth edition have been revised by their authors and reprinted, and other entirely new articles have been prepared exclusively for this book. Included among the new articles are a clear presentation of methods of making a job analysis in a hospital, a check list of services to patients, a list of possible functions of a women's auxiliary and an authoritative description of methods and procedures in hospital publicity. There are also specific suggestions for the preparation of a budget for small hospitals, a thorough canvass of the uses, methods and safeguards of oxygen therapy, a comphehensive manual of the technique of medical asepsis in communicable disease wards, a competent exposition of the problems involved in choosing a color scheme for a hospital and a digest of the standards for hospitals proposed by national organizations. The glossary of hospital terms has been substantially revised and extended.

The second half of the book contains the classified directory section and the catalogues of manufacturers. It has been thoroughly revised and considerably simplified. There are many more catalogues this year, indicating not only a return of more normal business conditions but also a recognition by manufacturers of the wisdom of making their catalogues readily available to hospitals in the reference book that hospital administrators use daily.

The Well Read Administrator

HOSPITAL administration belongs to the learned professions, though we do not often see it classified that way because of the "business" character of many of its activities. It will be seen on closer scrutiny, however, that the social quality of hospital administration is its dominant characteristic. That is why the protagonist of hospital administration must keep well informed in matters of a professional nature.

The ability to rule by instinct is a gift, but too many problems that face the administrator are unprecedented or at least outside of his daily routine, to permit successful management without considering the experience of others. Chiefly for this reason, but also because the administrator's decisions must show learning and authority, and because these decisions must command the respect of the professional groups of the hospital and others (including the board of trustees), the administrator must be well informed and up to date with his reading. Medical journals must be scanned on their way to the medical library in search of new ideas, whether the administrator be physician or layman, and the literature of the social sciences, of nursing, of nutrition and of pure administration must not be neglected. The well-read administrator is better able to meet his chiefs of staff on their own ground, and to understand their problems, than his colleague who curls up in his own shell and stays there.

The only difference in this respect between the hospital administrator and the physician, the judge, the lawyer, the teacher or the business man, is that he must be all of them at the same time. Most of what these worthies know is contained in good books and journals, while the rest is his heritage, as well as theirs.

Politics Rampant

IN MANY states the people will have expressed their choice at the polls for their government officers when this is read. For weeks a political battle of words has filled radio programs and the columns of the press. The hospital has not escaped. This magazine has no official interest in the claims or even the successes of local or national contending parties. It has but one platform plank, the better daily medical care for almost a million of the country's population. It calls for a halt on the use of the hospital's personnel as tools to carry a political clique to success at the polls.

The voluntary hospital can be harmed but little by the greedy grafting political boss. The state institution is at his mercy. For those high in authority to discharge whole boards of self-sacrificing trustees and replace them with illiterate or low-visioned satellites of their own creed in order to get votes and jobs is the lowest type of social debauchery.

Can nothing be done? Should good citizens sit idly by while sickness, distress and poverty are used as pawns in the political arena? Is there one who can defend this policy? What can the organized profession of hospital administrators do in this social emergency? Where is the wrong being done? Look about you — in your own city, county or state. To permit a great injustice to be done to any or all of the nation's sick without at least hospital and medical associations and publications forcibly directing attention to the unfairness and folly of such a policy is cowardly even though to do so may be futile.

Who Superintends Hospitals?

HOSPITAL administration as a profession has experienced interesting developmental changes during the past decade. Economically it has dwelt amidst scenes of peace and plenty and it has endured times of panic and poverty hardly equaled since the incorporation of the country's first hospital. It has required bravery, equanimity and much executive ability to direct it through this decade's troublous times.

The effect of this stress upon the administrator himself has not always had a fair or happy outcome. He has sometimes been supplanted by inexperienced board members. Trustee committees have dissected his work and have endeavored by thus dividing the executive responsibility to save a major salary item. Efficiency experts with no work or hospital experience have replaced well trained men and women who were victims of the times only.

The trends in the type of person administering the nation's hospitals are interestingly set forth in the last hospital number of the *Journal of the American Medical Association* (March, 1935). On January 1, 1935, 3 per cent and 12 per cent fewer institutions were administered by physicians and laymen respectively while 15 per cent more hospitals were directed by nurses than was the case a decade ago.

The implications of this trend are not wholly clear. Many of the smaller institutions are efficiently administered by nurses who in some instances are institutional and nursing superintendents. Physicians less often perform both executive and medical work. The smaller number of lay executives is difficult to understand. The accession of not a few board members to the administrative field apparently has not often served to replace physicians or nurses.

It matters but little, however, who superintends the hospital if his or her past training and personal qualifications are of a high order. While nurses most often are found heading small institutions, this is not always the case since several large hospitals are being splendidly directed by

them. The change in type of administrator has largely affected the nurse and lay group. In ten years almost one thousand fewer hospitals were superintended by laymen and almost an equal number more by nurses. Administrative training and tact, not a medical, nursing or academic degree are most important to the good executive.

Who Owns X-Ray Plates?

IN MICHIGAN recently the Supreme Court ruled that the x-ray films taken by a physician in the course of the examination of a patient were not the property of the latter even though he had paid the former for the study.

Said the court in effect, "X-ray films are not understandable to the average layman. They are only one step in the diagnosis, useless without the expert skill of the physician to interpret them." They are a part of the patient's records compiled by the doctor to be used by him in arriving at a diagnosis.

This decision raises some nice points which apply to hospital work. May the administrator refuse to surrender radiographic negatives to patients who contend that they are only asking for their own property? Tissue slides are not so considered nor are throat smears and cultures. It is probable that in other states similar decisions will still further extend and clarify this interesting problem.

Hospitals Climbing Out of the Depression

THE occupancy of nongovernment hospitals is steadily returning toward the level that during the twenties was considered normal. While the effects of the depression have not entirely passed and of course will not so long as a large proportion of persons are unemployed or employed at "security wages," voluntary hospitals have climbed a long way from the bottom reached in 1933.

Statistical evidence of this fact is found in the occupancy figures published in the Hospital Barometer on page 8 of each issue of The MODERN HOSPITAL. For 1933 these figures showed an average occupancy in nearly 300 nongovernment general hospitals of 54.3. By 1934 the yearly average had climbed to 57.9 and each month in 1934 was higher than the corresponding month of 1933. For the first ten months of the current year the average is 61.9. Again each month of 1935 shows an advance over the corresponding month of 1934 and, of course, a decided advance over 1933. Furthermore five of the ten months are above the 1930 average for all nongovernment general hospitals as ascertained by the American Medical Association, namely 62.0 per cent.

While these advances are not as spectacular as the advances in certain types of business activity, neither were the preceding declines as great. Nevertheless the ground regained has brought decided relief to many voluntary hospitals. In the United States such a large percentage of the total voluntary hospital costs is paid by patients that the decrease in endowments and gifts can be viewed with less concern as earnings become more satisfactory.

One further fact pointing in the same direction is the slight decrease in the occupancy of the government general hospitals. The forty-four hospitals regularly reporting had an average occupancy in their 25,000 beds of 85.5 in 1933, which increased to 87.7 in 1934. For the first ten months of 1935, however, there has been no further increase, the average occupancy for the period being 86.8 in these hospitals.

A Question of Terminology

NURSE training school is a term that suggests apprenticeships, the preparation of animals for exhibition or the attempt to create skill by repetition only. It describes not at all a fine ethical educational activity which, based on carefully formulated standards and curriculums, prepares young women for a splendid profession. It suggests that allowing a nurse to work in a hospital for three years represents the major portion of her training.

Accent should be more strongly placed on the word "school" than on its participial modifier. The administrator of the school might be its principal or its directress rather than the chief nurse or the directress of nurses. If as is usually the case this officer is responsible for the educational as well as the nursing activities of the students of her school, she may be denominated as its principal as well as the directress of nurses.

In order of authority, should then be found in the school's administrative set-up one or more assistant directresses, an educational directress or instructor of nurses, supervisors, head nurses, general duty nurses, postgraduate nurses and student nurses. In smaller schools all of these classes may not exist but in any case lines of authority should be carefully diagrammed and titles should be as descriptive as possible. Let us educate our nurses, not train them.

PLANT OPERATION • • • •

Conducted by John R. Mannix and R. C. Buerki, M.D.

Controlling Environmental Conditions in Premature Nurseries*

By Kenneth D. Blackfan, M.D., and Constantin P. Yaglou
Boston

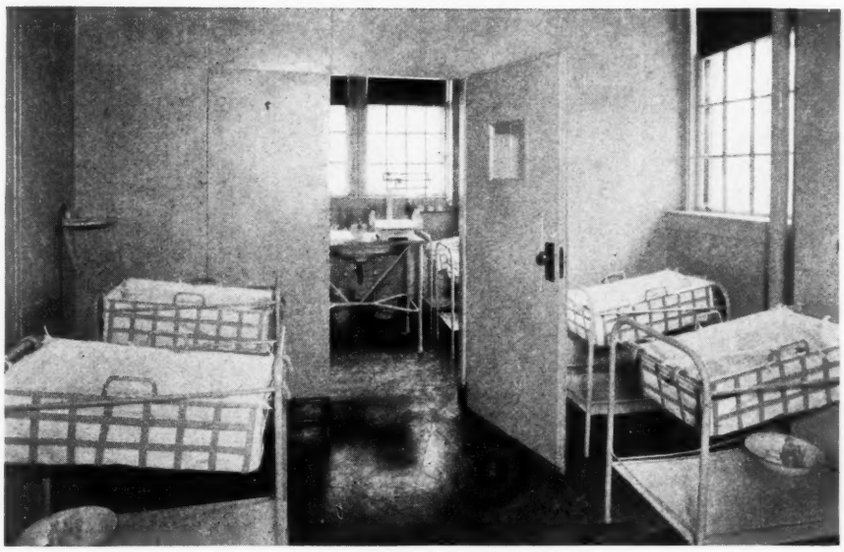


Fig. 1. Nursery for premature infants showing the outer room and inner room separated by a metal partition and a heavy metal door opening into the outer ward. There is space for six infants in each ward.

THE usual means for controlling the body temperature of premature infants are heated beds, electric pads and electric incubators and the application of plenum systems of heating and ventilation.

Most of these methods have not entirely fulfilled the environmental needs of premature infants on account of limited air space, inadequate ventilation, insufficient humidification in winter and lack of facilities for cooling and dehumidifying the air in warm weather. Where mechanical ventilation is used, there is a tendency to fix the temperature of a single room at 80° F., regardless of humidity and of the individual requirements of the infants. These mechanical systems, too, are not as a rule equipped to provide cooling and dehumidification of the air in warm weather. The necessity for such provision is clearly illustrated by the work of Dodd and Wilkinson[1], who discussed the relation between excessive summer heat and obscure fevers in infants.

The general requirements for premature nurseries can be most satisfactorily met by the use of a central system of air conditioning which includes cooling as an essential part of the general equipment, even though the latter may be needed for only a month or two each year. Refrigeration is usually available in hospitals at small expense since most modern establishments are equipped with brine circulating systems.

The effect of environment on the growth and development of premature infants has been the subject of an investigation at the Infants' Hospital, Boston, by means of a central air conditioning system, whereby the temperature, humidity and ventilation of the nurseries were kept automatically under control. A description of the air conditioning system which has been used follows.

The nurseries of the Infants' Hospital consist of three separate rooms with the following dimensions: 12 by 8 by 12 feet; 12 by 12 by 12 feet; 11 feet 9 inches by 20 by 9 feet, the last dimension being the height in each instance.

All three rooms are equipped with double windows. The first two rooms are reserved exclusively for premature infants and together they accommodate twelve infants (Fig. 1). The third room, which accommodates from twelve to sixteen infants, is used as an observation nursery for special types of cases. One of the larger rooms was partitioned into cubicles at the time the system was installed, but the partitions were removed a few years later.

Changing the Air

The mechanical equipment[2], which is in the basement of the building, has sufficient capacity to produce about twenty-five changes of air an hour in each of the three rooms. This high rate was found to be necessary in order to keep the atmosphere free from odors and in order to control adequately the temperature and humidity in the extreme weather of this locality. By proper distribution of air, drafts were avoided. The movement of air about the beds was about 15 feet a minute.

It is possible to adjust the apparatus so that wide ranges in the air conditions can be secured. In winter each of the three rooms may be kept at a maximum temperature of 110° F. with a maximum absolute humidity of about 220 grains of moisture per pound of air, when all the air is taken from outdoors at 0° F.

In hot weather the rooms can be cooled to a temperature of 75° F. and the absolute humidity lowered to 70 grains per pound of air. In cool weather, lower indoor temperatures are possible and by recirculating part of the air the temperature and humidity can be kept at a still lower level. Any desired air condition within the specified range can be maintained automatically in summer or winter within ± 2° F. (sling psychlerometer).

Apparatus Is Described

A simple diagram of the central air conditioning apparatus is shown in Fig. 2 and a photograph of it in Fig. 3. The essential principles of operation are as follows:

Air from outdoors, drawn in by fan

*At the request of the Editor, the authors have prepared this discussion from "The Premature Infant," a study published in the American Journal of Diseases of Children, 46:1175, 1933.

[1]Dodd, K. and Wilkinson: External Heat Cause of Fever in Children, J. A. M. A. 88: 787, 1927.

[2]A more detailed description of the engineering aspects of this air conditioning instal'ation has appeared elsewhere—Yaglou, C. P., Drinker and Blackfan: Application of Air Conditioning to Premature Nurseries in Hospitals, J. Am. Soc. Heat. and Ventilat. Eng. (sect. heat. pip. and air condit.) 2:605, 1930.

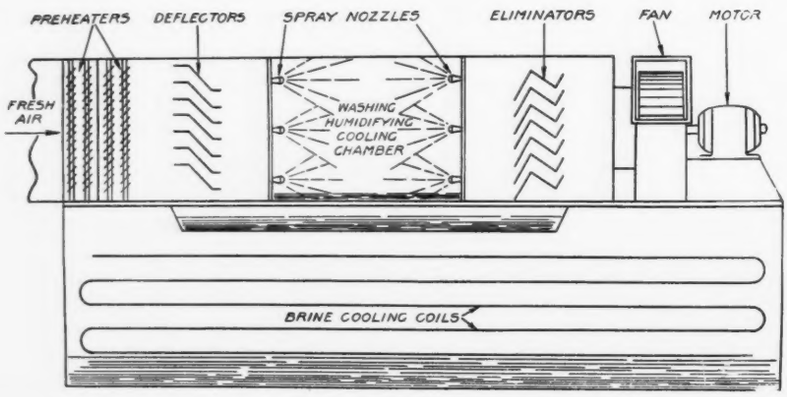


Fig. 2. Diagrammatic sketch of the central air conditioning apparatus.

suction, passes over the preheaters (on the left of Fig. 2) which automatically raise its temperature to about 45° F., thus preventing the water from freezing in cold weather. The air then passes through the spray chamber, where it comes in contact with a finely atomized mist of water emerging under pressure from the nozzles of the spray. A centrifugal water pump (not shown in Fig. 2) maintains the circulation through the spray system.

This procedure washes out the coarse dust in the air and removes soluble impurities. At the same time, the air absorbs or gives up moisture according to the temperature of the water. In this way the humidity in the rooms is regulated. Drops of water and dust carried over by the air stream from the spray chamber are caught by impingement against the eliminator plates (on the right of Fig. 2).

The fan then forces the air over individual heaters, and thence into the rooms. The conditioned air enters the rooms near the ceiling and, after circulating across the room, is withdrawn near the floor by means of an exhaust fan. Fig. 4 shows the general arrangement of supply and exhaust ducts in the larger of the two rooms reserved for the premature infants. The used air may be expelled outdoors, or part of it may be returned to the central apparatus for reconditioning and recirculation.

In winter the dry bulb temperature in the rooms is regulated automatically by means of thermostats which control the flow of steam through the individual indirect heaters. The humidity is regulated at the central apparatus by controlling the temperature of the water. A heater warms the water on its way to the sprays.

A thermostat at the exit of the air washer controls the amount of steam flowing through the water heater, so as to maintain automatically a dew point of about 64° F. in the air leaving the air washer. This corresponds to a relative humidity of 65 per cent when the temperature of the room is 77° F. With higher temperatures, the relative humidity would be less, and vice versa, since with a single air washer the dew point, or moisture content, in all rooms has to be the same.

In summer the warm and humid air from outdoors is cooled and dehumidified to 64° F. by contact with the spray of cold water. The water is cooled in the lower chamber of the apparatus (Fig. 2) by trickling over cold pipes through which brine is circulated under pressure. The thermostat at the exit of the air washer is made to control the flow of brine through the cooling pipes so as to maintain the desired dew point of 64° F.

In passing through the fan and ducts the temperature of the air increases from 2 to 7° F., depending on the location of the room and on the weather conditions. In circulating through the rooms, the air absorbs sufficient heat from the warm walls, glass, lights and bodies of occupants to raise its temperature and at the same time to decrease the relative humidity to the desired degrees. If the leakage of heat into the rooms through the walls and glass is not sufficient to produce this effect, as is often the case in cool weather, the reheaters automatically furnish whatever additional heat is needed.

Continuous permanent records of dry and wet bulb temperatures in the rooms are made by means of automatic recorders.

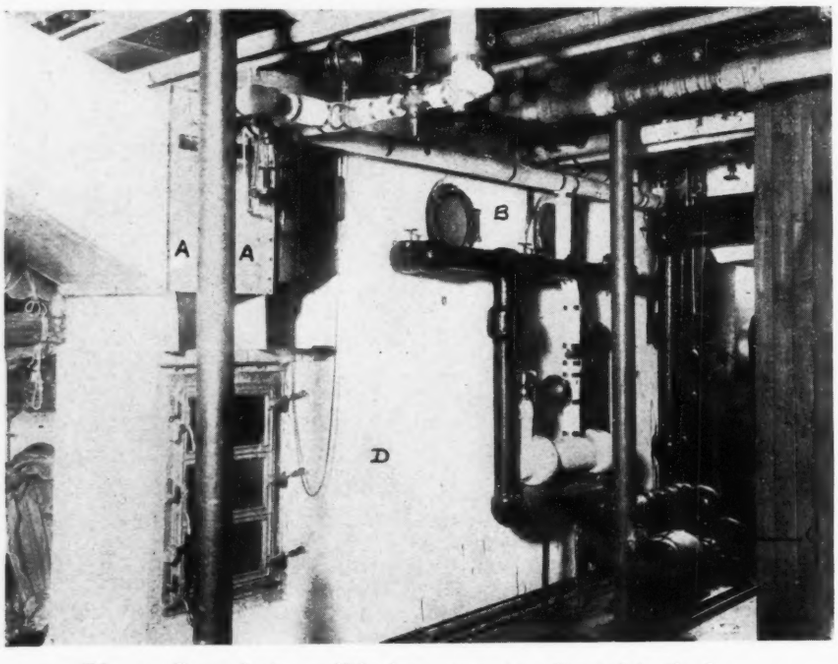


Fig. 3. Central air conditioning apparatus situated in the basement directly under the nursery: A, preheaters; B, spray chambers; C, water pump, and D, water cooler.

Operating the System

Success in applying these systems to nurseries for premature infants depends as much on operation as on design. The operation of the equipment, therefore, should not be entrusted solely to the engineer at the hospital unless he understands well the principles of air conditioning. The system should be thoroughly checked once or twice every year, and care should be taken to keep the apparatus clean, for if mud and fungi are allowed to accumulate in the air washer and cooler, musty and sour odors will pollute the air in the rooms.

Whereas the purpose of this communication has been to present from the engineer's point of view the air conditioning requirement of premature infants at the Infants' Hospital, Boston, it may be of interest to summarize a few of the medical aspects of the results of a study which has

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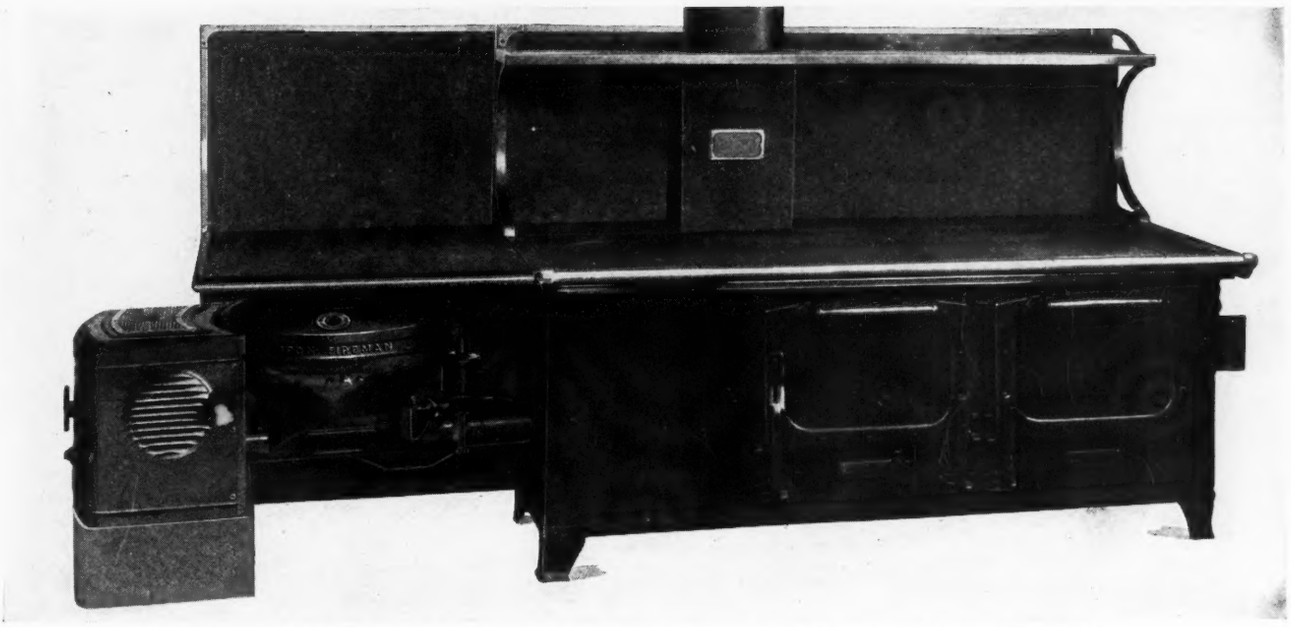

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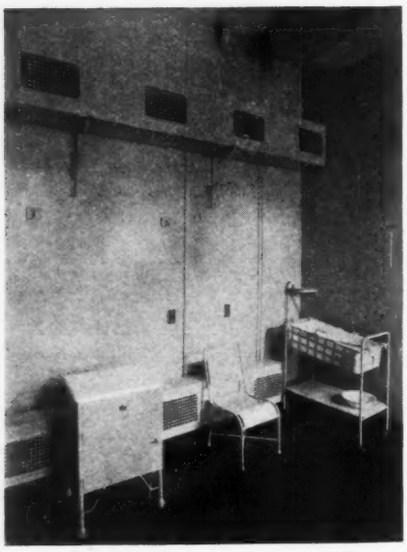


Fig. 4. Supply (top) and exhaust (bottom) ducts in larger nursery for premature infants.

been conducted over a period of 9 years.

The body temperature of the premature infant can be controlled much more adequately in rooms in which the temperature, humidity and ventilation rate are properly regulated than in rooms in which these physical factors are allowed to fluctuate.

The humidity best suited to the needs of premature infants appears to be about 65 per cent. The temperature may range from 75 to 100° F., depending to some extent on the general constitutional state of the infant and the body weight. A humidity of 30 per cent induced instability of body temperature and other untoward effects often leading to serious consequences.

Body temperature and fluctuations in body temperature under controlled air conditions are related to body weight. In low weight groups the body temperature was about 98° F. and the fluctuation comparatively high. As the weight increased the body temperature rose, and the fluctuation was reduced until at about 5 pounds the temperature was stabilized close to 98.6° F. with a diurnal fluctuation of about 2° F.

Thereafter the response of premature infants to the environment was similar to that of full-term infants. A subnormal temperature, particularly in the low weight groups, is a characteristic of prematurity. Attempts to raise the body temperature of small infants to the supposedly normal level of 98.6° F. are not necessary, as overheating may be detrimental to proper growth and even may lead to death.

The maximum gain in weight in patients weighing less than 5 pounds occurred under high humidity in the conditioned nurseries. The gain in weight was less under low humidity and in the unconditioned nursery. The least gain in weight occurred after removal to the general wards.

Whereas infants who weighed less than 4½ pounds gained more rapidly in high than in low humidity, the reverse was true of infants who weighed 4½ pounds or over.

Air conditions in general and low humidity in particular exerted a conspicuous influence in initiating symptoms referable to the digestive tract. The application of air conditioning to the premature nurseries of the Infants' Hospital was followed by a marked reduction in the incidence of diarrhea and in the mortality rate. Infections were reduced to a minimum and gains in body weight increased.

The body weight seems to be the most important single criterion for judging the environmental requirements of premature infants. This index has been found to be more reliable than the estimated fetal age, chronological age or body length.

In conclusion it may be said that success in the treatment of premature infants depends mainly on four factors: (a) stabilization of body temperature, (b) proper nutrition, (c) nursing care and (d) prophylaxis against infection. The importance to premature infants of adequately controlled ventilation is demonstrable; however, it should be emphasized that the successful care of premature infants should be attributed to advances in medical treatment and improvement in nursing and general care, as well as to the installation of the air conditioning system that has been described.

When It's Wash Day for the Walls

By Conrad Pykoski
Operating Mechanical Engineer, Minneapolis

WALLS and ceilings can be cleaned by washing much more cheaply than by repainting. When the inside of a building is to be painted, washing the walls and ceilings will save at least one coat of paint. The work can be done with common labor with one trained man to supervise the work.

If there is a great deal of wall and ceiling washing to be done, it is advisable to build a folding scaffold for convenience and safety of the workmen. It will save time when moving the painting crew from one room to another.

A scaffold of this type is equipped with adjustable legs which permit it to be raised or lowered according to the height of the ceilings. It is also equipped with casters of a sufficient size so as not to mar the floor when it is moved from place to place. The brace and platform are high enough to clear desks and tables. Such a scaffold can be moved from one part of the room to another without dismantling. The platform is about 10 by 16 feet. When the work is completed in a room, it is only necessary to remove the drop cloth and the planks that comprise the floor of the scaffold, and the scaffold can then be folded so that it can be moved out of the room through the door.

When the surface to be washed is so dirty that it is necessary to use a strong cleaning solution, the men are provided with a good grade of rubber gloves. When the washers are using gloves, the supervisor should instruct them not to let the gloves rub on the rough surface that is being washed. If the washers are taught how to hold the sponge correctly, there is no need of cutting the gloves on the walls.

Washers are also provided with large wool sponges. When washing rough surfaces it is important that the sponges be used in the correct manner, which is a circular motion. Small circles are described, the center of the sponge being moved not more than one inch at a time. It is a sort of rolling action. If the sponge is used in a scrubbing manner, it will last but a short time.

A special scaffold should be provided for washing walls in auditoriums and gymnasiums where the ceilings are extremely high — preferably one which can be set up quickly and adjusted to any height and which is rigid. If the scaffold is loose and flimsy, the washers experience a sense of insecurity and thus perform their work under a mental handicap.

The real secret of success in washing painted walls and ceilings lies in the cleaning method used and the competence of the workmen.

The person in charge of the washing job should feel his way as to the amount of cleaning agent that should be added to the cleaning water. By this is meant that he should take a sponge and a pail filled three-quarters full of water just warm enough to be comfortable to the hand, about 65° F., no warmer. The cleaning agent should not foam or lather; many of them do if warmer water is used.

Submerge the sponge in the clear

"Ivory Soap is actually healing this sore, Doctor."

"Not at all. Nature's doing it. The soap merely cleanses the wound. But the profession recommend Ivory Soap always for bathing wounds or sores. You can easily see why. If your neck had been washed with an impure soap it would have irritated it greatly."

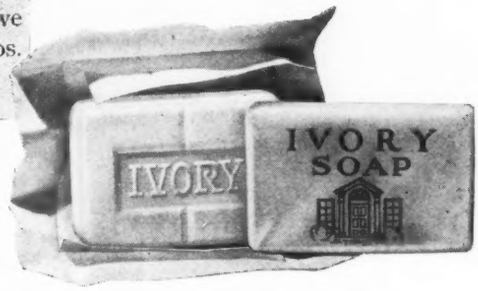
"What soaps are impure, Doctor?"

"Nearly all. The Ivory is a notable exception. That's why we doctors use it. Especially avoid colored or highly perfumed soaps. I am always suspicious of them."

COPYRIGHT 1890, BY THE PROCTER & GAMBLE CO.

Here is one of a series of advertisements which told its story of Ivory Soap's purity and gentleness to the readers of Christian Herald back in 1890, forty-five years ago.

Important in 1890 —equally important today . . .



It is not surprising that doctors were the first to appreciate fully the importance of Ivory Soap's purity and gentleness.

In the early 80's, when Ivory was introduced and first advertised, many physicians used and recommended it for the care of sensitive skins. They realized the value of Ivory's purity . . . its freedom from irritating ingredients and strong perfume.

Ivory's widespread use in American hospitals today is indicative of the respect it has earned with medical authorities during the past 56 years. The almost universal hospital acceptance of this fine toilet soap speakes volumes for its outstanding quality.

Miniature Ivory

Six miniature sizes of Ivory Soap, in addition to the 6-ounce and 10-ounce cakes, are available for hospital use. You may choose from ½ oz., ¾ oz., 1 oz., 1¼ oz., 2 oz., or 3 oz. cakes wrapped or unwrapped.

•

PROCTER & GAMBLE *General Offices, Cincinnati, Ohio*

water, and squeeze the water from the sponge so it will not drip. Then proceed to clean a small area of the wall, a spot about 12 inches in diameter. The foreman of the job should do this in several places on the surface to be cleaned. If the clear water does not remove the stain or grime, he should add a small amount of the cleaning agent to the water — a teacupful — and again go over the same spot. He should continue this procedure until the cleaning solution reaches the desired strength — just strong enough to lift the dirt and grime with a small amount of work. This testing process should be repeated in every room and on every surface to be cleaned before it is cleaned, as a mixture strong enough to remove the dirt and grime from one surface may be so strong that it will totally destroy another surface; or a weak mixture that will remove the soil from the surface in one room may not be strong enough to have any effect upon the surface in another room.

Outside walls are always harder to clean than inside walls. The ceiling under the attic does not clean as easily as the ceiling of the floor below. After the required strength of the cleaning solution has been determined, a large quantity of the solution can be mixed in a barrel so as to have all the washers using solution of the same strength.

Not Much Water Needed

The grade of paint used originally on the walls and ceilings assumes an important part in the cleaning process. If a thin paint was used that left the plaster dirty and porous, great care must be taken to prevent the dirt that is cut loose by the cleaning process from being sucked up into the pores of the plaster, as dry plaster has a great affinity for water. If this occurs, it is almost impossible to remove the dirt a second time. To reduce this suction action to a minimum, use as little water as possible. Walls and ceilings that have been painted with a sufficient number of coats of a good grade of paint can be washed a number of times. This is always a satisfactory situation as washing is cheaper than painting.

There are some walls and ceilings that cannot be cleaned by washing. This may be due to the quality of paint that was used originally, or because dirt got into the pores of the paint before it had sufficient time to dry. On plaster surfaces that are subjected to almost continuous sunshine, the dirt is baked into the paint. Under such circumstances, the surfaces are difficult if not impossible to clean.

Now as to the procedure to be followed in washing walls and ceilings.

Each washer is provided with two pails and two sponges. One pail contains the cleaning solution and the other clear water. The pail with the cleaning solution should carry some mark of identification, as this material should not be used for rinsing. A sponge is placed in each pail. Place a drop cloth on the floor along the wall that is to be cleaned, and start from the floor and work up the walls toward the ceiling.

Use Circular Motion

Take the sponge from the pail containing the cleaning solution, squeeze it out sufficiently to prevent dripping, and then apply it to the wall, using a circular motion, as heretofore explained. Go over a part of the wall about 24 inches square. As soon as the dirt starts to loosen, put this sponge back into the pail containing the cleaning solution. Take the sponge from the pail containing clear water and squeeze it out sufficiently to prevent dripping. Apply to the same part of the wall that was previously treated with the cleaning solution, using the same circular motion, covering the area on which the dirt has been loosened. Rinse the sponge in clear water and squeeze it as dry as possible. Pick up all loose dirt and rinse well. The rinsing water must be changed frequently. Then wipe the part of the wall that has been cleaned as dry as possible with the sponge.

For the next portion of the wall to be cleaned, lap over into the cleaned area far enough to prevent border marks. The object of starting at the floor and working toward the ceiling is to prevent streaking. If the washing process is started at the ceiling and a small portion of cleaning solution runs down over the dirty part of the wall, it will leave a streak that is impossible to remove. On the other hand, if a small portion of cleaning solution runs over the cleaned wall, it is easy to pick it up and it will not leave a streak.

After the walls have been cleaned up to the level of the scaffold, the folding scaffold is put into place and a drop cloth of sufficient size to cover the entire platform is put on it. The washers should be instructed not to reach over the scaffold. A trained washer will drop little water. Experienced men who wash walls and ceilings for eight hours a day finish with the drop cloth as dry as when they started to work.

Washing Ceilings

When washing ceilings it is often advisable to let the washers use rubber gloves with a full length cuff. The cuff is turned up toward the fingers. If any water runs down the glove it will be caught in the cuff. When the operator returns to the pail to rinse the sponge, the water will run out of the cuff into the pail. This procedure prevents the liquid running up and down the arm. It is general practice to have about eight men working on a scaffold, and one man taking care of the pails, especially the rinse water pails, as it is highly important that the rinse water be changed frequently. The cleaning solution is not changed, but is completely used.

The air condition of the room determines the size of the section of the surface that can be cleaned at one time. The cleaning solution must not be allowed to dry on the wall or ceiling. Hence the necessity for thorough rinsing. In some cases, full strength cleaning solution may be used without damaging the paint.

This is strictly a question of good judgment on the part of the foreman.

When the interior of a building is to be repainted, and the walls and ceilings are very dirty and cannot be satisfactorily cleaned with the usual cleaning agent, it may be necessary to use tri-sodium phosphate, finding the strength of material to be used in the same manner as heretofore explained. More care must be taken with tri-sodium phosphate than with the usual cleaning agent, because it is far more powerful than the usual cleaning agent, and if not carefully used, makes a solution that will cut and destroy the paint.

The height of the scaffold is determined by the height of the washers. A washer's head, when washing ceilings, should be six inches from the ceiling. A greater distance than this will cause the washers to reach. This tires them rapidly. A lesser distance than this requires the washers to crouch and prevents them from seeing clearly what they are doing. Hence the necessity of having washers of a uniform height.

The Outside Noise Problem

Because of their location, some hospitals are confronted with a serious outside noise problem. "While just what degree of noise interferes with a patient's progress is a controversial subject," says W. Mezger, superintendent, Knickerbocker Hospital, New York City, "nevertheless we can agree, I believe, that street noises, particularly in congested areas, can exercise a disturbing influence.

"The shutting out of noises usually interferes with ventilation. To meet this condition there is available a unit which can be easily installed in the window. By means of an electrically operated fan, air is admitted in any desired volume up to the capacity of the machine, and passes through an efficient filter. Noise is eliminated through a baffle, and the effect is the same as though the window were closed."

THE RESULT OF 35 YEARS

DEVOTED TO THE MANUFACTURE OF FINE BLADES

Steel experts recognize that the ultimate in keenness is the razor blade. No scalpel is as sharp. No other instrument has as flawless a cutting edge.

For 35 years, the American Safety Razor Corporation has manufactured blades renowned for their uniform keenness—the famed Gem Micromatic Razor Blades and Ever-Ready Razor Blades. It is not unnatural that A. S. R. Surgeon's Blades should be the finest obtainable.

A. S. R. Surgeon's Blades embrace a variety of designs—9 in all to fit all preferences and requirements. They are packed six blades to a package, each blade individually wrapped in glassine envelope. The package is sealed in cellophane.

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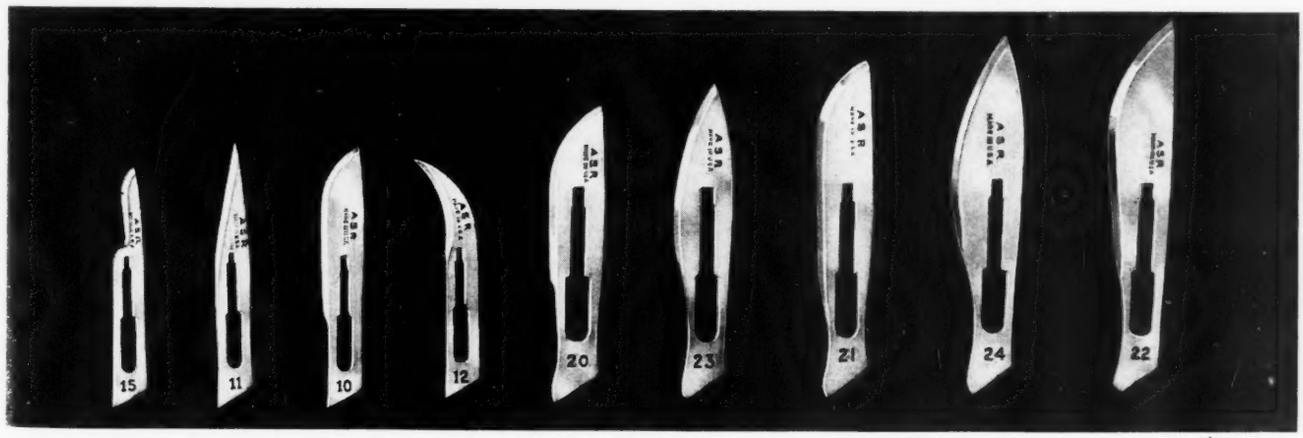
Every A. S. R. Surgeon's Blade is guaranteed as to keenness and uniformity.

Each package bears the illustration and identifying number of the blade it contains.

These fine blades cost $12 per gross, list, subject to attractive quantity discounts. Ask your dealer for complete price information or write us direct for details. We will furnish gratis sample of the blade you prefer if you will send us the number.

American Safety Razor Corporation, *Surgeon's Blade Division*, Dept. M.H. 2, Brooklyn, N. Y.



FIT ALL STANDARD SURGICAL HANDLES—OLD OR NEW

FOOD SERVICE • • • • •

Conducted by Anna E. Boller, Rush Medical College

Ringing in Christmas Cheer in a Southern Hospital

By Aileen Brown and Evelyne Neale

Director of Dietetics and Assistant Dietitian, Hospital Division, Medical College of Virginia, Richmond

AT FIVE o'clock on Christmas morning everyone is awakened in the nurses' homes of the hospitals at the Medical College of Virginia, Richmond. Soon thereafter throughout the colored and white hospitals the nurses are singing carols to the patients. Wearing their uniforms and carrying white lighted candles, they bring joy and peace. Surely patients awakened in this manner must be glad that it is once again Christmas Day.

The dietitians have been busy for weeks planning surprises for their big family. A storeroom has been so transformed that one would think Santa Claus had established his workshop there. Red produce bags have been made into stockings — large stockings for the grown-ups and small ones for the children — and, filled with fruits, candies and toys, and tied with string and holly, they are stacked in a corner, all ready and waiting to brighten the faces of the ward patients. Nearby lie small boxes of stuffed dates and homemade candies decorated with red and green cherries. These boxes in transparent wrappings and tied with bright ribbons are waiting to bring cheer to private patients.

In still another corner are cards which have been made by burning the edges of pictures cut from holiday paper and pasting the pictures on white cards. A "Merry Christmas" in red ink has been added and these cards will brighten supper trays. Near-by, lie bookmarks and tray cards of red paper decorated with white ink. High up on a shelf are stacked engraved greeting cards from the hospital. Surely these should make Christmas happy for the shut-ins!

Small packages of fruit cake in green and red transparent wrappings and tied with gold and silver ribbon lie on trays decorated with holly and mistletoe. Huge baskets of fruit, candy and nuts tied with ribbon and holly fill the shelves. Now, on Christmas morning, the dietitians are waiting to bring Christmas joy to the hospital.

After visiting the hospitals the nurses come to the cafeteria singing

Baskets of fruit, candy and nuts, Christmas stockings made of red produce bags and decorated with holly, daintily wrapped boxes tied with bright ribbons and filled with dates, homemade candies and fruit cake, pile up on the storeroom shelves as Christmas approaches, as a result of the work of enthusiastic dietitians.

Gorham

MANUFACTURES A COMPLETE
LINE OF HOSPITAL SILVERWARE

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The Hallmark of Quality

THE GORHAM COMPANY
HOSPITAL DIVISION

CHICAGO
10 South Wabash Avenue

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972 Mission Street

GORHAM SILVER SOLDERED
The Hallmark of Quality

As the nurses approach the cafeteria, singing carols, the scene that meets their gaze is that of the Christ Child and the Wise Men. This has been made out of colorful vegetables and placed on the counter. A hidden flashlight shining on the manger gives the effect of the Guiding Star.

carols and carrying lighted candles. The scene of the Christ Child and the Wise Men, made of vegetables is on the counter. A hidden flashlight shining on the Manger gives the effect of the Guiding Star.

In the dining room is a Christmas tree, which has been frosted by spraying whitewash and sprinkling snow on a cedar tree. It is decorated with blue balls and placed on an old dresser mirror, and is lighted with blue lights shining on the mirror and reflecting in the tree. Smaller trees in the double windows seem to catch this light and look like miniatures of the larger one. On the small dining room tables, crystal candlesticks holding white candles tied with blue chiffon ribbon and sprigs of holly send out a greeting. On a large table are festive baskets, entwined with icicles, holly and mistletoe. These are kept filled for the nurses. Cedar and holly wreaths on the doors complete the decoration of the room. Here the Christmas story is read by the dean of nurses and arouses reverence in the hearts of the listeners.

The doctors' dining room is treated in a similar manner. The private dining room with red tarlatan curtains and a bowl of bright colored Christmas tree balls on each table is ready to serve any guest of the dietary department, while the cafeteria and dining rooms for the colored are bright with red bells, tinsel, evergreens and gaily decorated trees.

After breakfast interest is centered in the main kitchen where strains of music mingled with the noise of pots and pans have been heard since before dawn. Here, gathered around their tree, the entire colored kitchen personnel sing spirituals. Many members of the staff listen to the strains of "Nobody Knows De Trouble I See," "You Ms' Hab Dat True Religion" and "Sinner, Please Don't Let Dis Harvest Pass." Finally "Silent Night" and "Jingle Bells" are sung and then the employees open the gifts they have received from one another and from members of the staff. The high light for them is the guest of honor — the leader of the Sabbath Glee Club. This program is followed by a breakfast of their own choice, where a big bowl of oyster stew is the main dish.

All morning the dietitians hold open house in the kitchens and college faculty and hospital staff are free to stop and see the dinner prepared.

During the morning the superintendent and other hospital administrators visit the patients distributing gifts and fruits, thus carrying the spirit of Christmas with them. The children are delighted because Santa Claus visits them in the early morning and sends them remembrances throughout the day. Surely the friends who have made this Christmas so lovely by gifts and contributions to the cheer fund will have a deeper understanding of this day. Staff members receive their greatest joy from such letters as the following:

"Dear Friend:

"When you place your order for Christmas turkeys, please remember to leave the children out. I am going to see that they get plenty turkey. Just let me know how many pounds they will eat. Do not figure too close, let's give them until it hurts (them). Want to send celery with turkey also or anything else you feel they will enjoy. Hope some day to be able to see the children."

"Dear Friends:

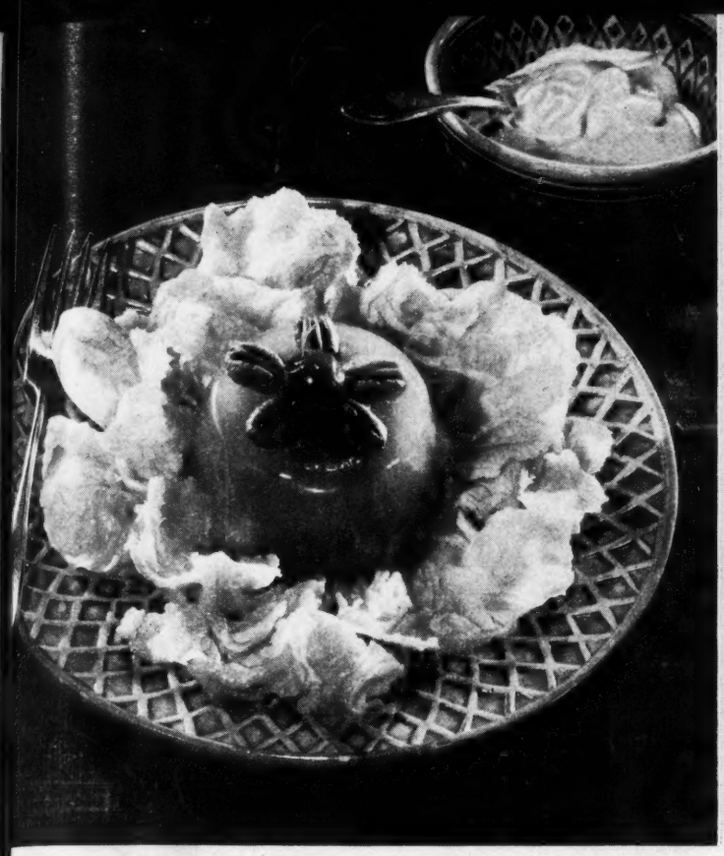
"What a real pleasure it always is for us to say "A Merry Christmas and a Happy New Year," by furnishing the ice cream for your annual Christmas dinner.

"At this season when the whole world lays aside its work-a-day cares and burdens to think again upon the beautiful story of the Three Wise Men and the Star that came to guide them, it is particularly fitting, we think, that we should express our interest in the charitable institutions in and around Richmond, and send our gift of ice cream.

"Will you kindly advise us as to your needs for this year."

Again at dinner and supper the hospital has a festive air as Santa Claus' workshop is depleted. When night comes, the spirit of Christmas, a symbol of beauty and an emblem of fellowship and good will, prevails.

Here is the Christmas tray and on it appear the hospital's engraved greeting card and one of the small boxes of goodies, in a colorful transparent wrapping. Tucked under the silver ribbon tie is a tray card of red paper decorated with white ink, with the patient's name and room number.



FOR THE PRIVATE PATIENT on a high caloric diet . . . this Pineapple Mold Salad! To a gelatin base made with Libby's Hawaiian Pineapple Juice, add halved seedless grapes and celery. Arrange nuts and a cherry in flower design in bottom of individual molds and pour in gelatin mixture. Serve with whipped cream dressing.

FOR THE NEUTRAL ASH DIET . . . feature a fluffy white cake with a smooth Pineapple Filling and Frosting. Make the latter by thickening Libby's Hawaiian Pineapple Juice with cornstarch (2 tablespoons of cornstarch to 1 cup juice), adding sugar to taste. Spread the mixture on both layers of the cake, and put them together.

For Diets that want to be Different!

3 NEW DISHES MADE WITH **LIBBY'S HAWAIIAN PINEAPPLE JUICE** . . . *RICH IN ESTERS*

HERE'S a sample of the many "appe-teazing" ways that you can use Libby's Hawaiian Pineapple Juice.

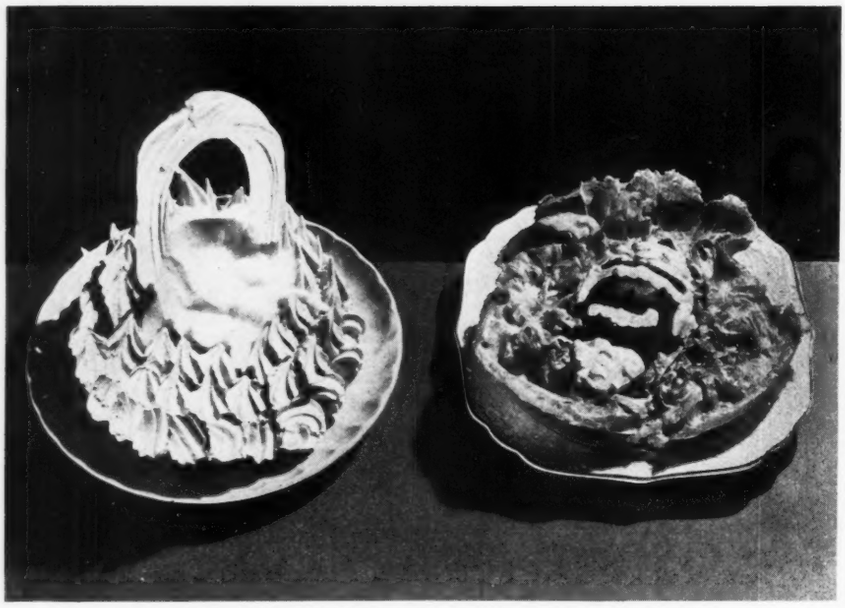
Libby's, you know, is just the pure, natural juice of sun-ripened Hawaiian pineapple, *unsweetened*. And it's rich in Esters, the flavor-carriers of the full-ripe fruit. Libby's is a valuable addition to the diet because it contains Vitamin A, and is a good source of B and C. Moreover, it supplies alkali-forming minerals and other nutritional elements which are uniform the year around.

So—serve Libby's Pineapple Juice often. Use it in salads and desserts to bring a refreshing variety to patients' trays; to your staff dining-room menus! You can get it from your usual source of supply. Specify *Libby's*, since it costs you no more than ordinary brands. Libby, McNeill & Libby, Dept. N—58, Welfare Bldg., Chicago.

Libby's 100 Fine Foods include Fruits and Fruit Juices, Vegetables, Pickles, Condiments, Canned Meats, Evaporated Milk, Alaska Salmon. Each comes in regular and special sizes for institutions. In addition, Libby packs Homogenized Foods for Babies.

ACCEPTED BY THE A. M. A. Libby's Hawaiian Pineapple Juice bears the Seal of Acceptance of the Committee on Foods of the American Medical Association.

FOR LIQUID DIETS . . . a DeLuxe Pineapple Drink is made by adding 1 teaspoon of raspberry jelly to each 6 oz. glass of Libby's Hawaiian Pineapple Juice, shaking well, and topping with a scoop of pineapple ice.



Christmas carol ice cream baskets and a Santa Claus salad.

Christmas Fun and Christmas Food at St. Luke's

By Frances Berkeley Floore

Director of Dietetics, St. Luke's Hospital, Chicago

AT CHRISTMAS time every attempt should be made to make the patients in the hospital feel that there is a Santa Claus and that he has not forgotten them. Being ill in the hospital at Christmas time is in itself disillusioning and it would be doubly so to have the day pass without being remembered.

The Christmas season is a gay one at St. Luke's Hospital, Chicago, for both patients and personnel. The week before Christmas we become conscious of the coming festivities when a cartload of Christmas trees arrive and are assembled in wards, dining rooms, clinics, and lobbies. These are decorated and beautifully illuminated with colored lights that sparkle and twinkle, but the one that surpasses all others is the tall and stately one in the courtyard. It fairly radiates beauty.

The windows are dressed with holly wreaths and massive poinsettia plants placed here and there lend warmth and radiance to the atmosphere. For weeks before Christmas the doctors' wives are busy filling stockings for the children's wards and a special fireplace is built in the children's dining room, large enough to permit the corpulent figure of Santa to come down the chimney with his big pack of toys.

Each child is remembered and the gifts are all those dear to the hearts of youngsters. If you could look in during the night you would see Santa frequently consulting a bunch of letters so he will be sure that little Mary gets the talking doll and Billy gets that electric train each has requested. And then there are many other toys not asked for but which the children are certain to enjoy while they are in the hospital.

And besides the individual gifts for the children there is a large assortment of books, tiny pianos, kiddie carts, and dolls that are gifts to the ward for the use of the children while in the hospital. In one corner of the room is a lovely group of figures representing the story of the Christ Child and the flight into Jerusalem.

The Christmas dinner at noon is served in the children's dining room and is a jolly and festive affair with favors, miniature trees, fancy caps and decorated trays. Even the clinic children are not forgotten. A group of one hundred assemble in the clinic and are taken down to one of the large hotels where they are served a turkey dinner and given gifts by Santa. The clinic also selects a group of its most needy families and a certain number are assigned to each social worker who takes her families on a shopping tour. She lets them purchase the groceries, clothes and toys that they would like to have, which are paid for out of a check donated by a member of the woman's board.

The hospital dietitian should give

•

MENU

Kris Kringle Oyster Supreme
Consommé
Radish Roses Salted Nuts
Celery Hearts
Roast Young Vermont Turkey
Chestnut Dressing
Cranberry Sauce
Glazed Sweet Potatoes
Snow Potatoes
Asparagus Tips, Hollandaise Sauce
New Green Peas
Santa Claus Salad
Holly Wreath Salad
Hot Mince Pie, Cheese
Christmas Carol Baskets
Coffee Cider Tea

•

Kris Kringle Oyster Supreme

Blue points on half shell, with sauce.

•

Christmas Carol Ice Cream Baskets

Color some meringue pastry a pale green and make rather flat meringue shells with a pastry bag. Also make some curved strips to form the handle of basket. At serving time fill the shells with strawberry ice cream that is fairly reddish in color. Flute the edge of the basket with whipped cream and place on the handle of basket. This makes a colorful dessert.

•

St. Nicholas Fruit Supreme

Pineapple sections, grape sections, peach sections, red and green maraschino cherries.

•

Holly Wreath Salad

Place a ring of sliced pineapple on some shredded lettuce. With strips of finely cut pimento make a red bow at the top. Around the sides place tiny sprigs of parsley for the holly with dots of red pimento for the berries.

•

Santa Claus Salad

This salad is made of one-half pear turned flat side down. Make the eyes of cloves, the nose of a piece of maraschino cherry, the mouth of a strip of pimento, and color the cheeks with the juice of maraschino cherries. The beard and hair are made of whipped cream, and a rather thick slice of pimento forms the red cap. Serve on shredded lettuce so Santa can see everything that's going on, instead of being buried in a lettuce cup.

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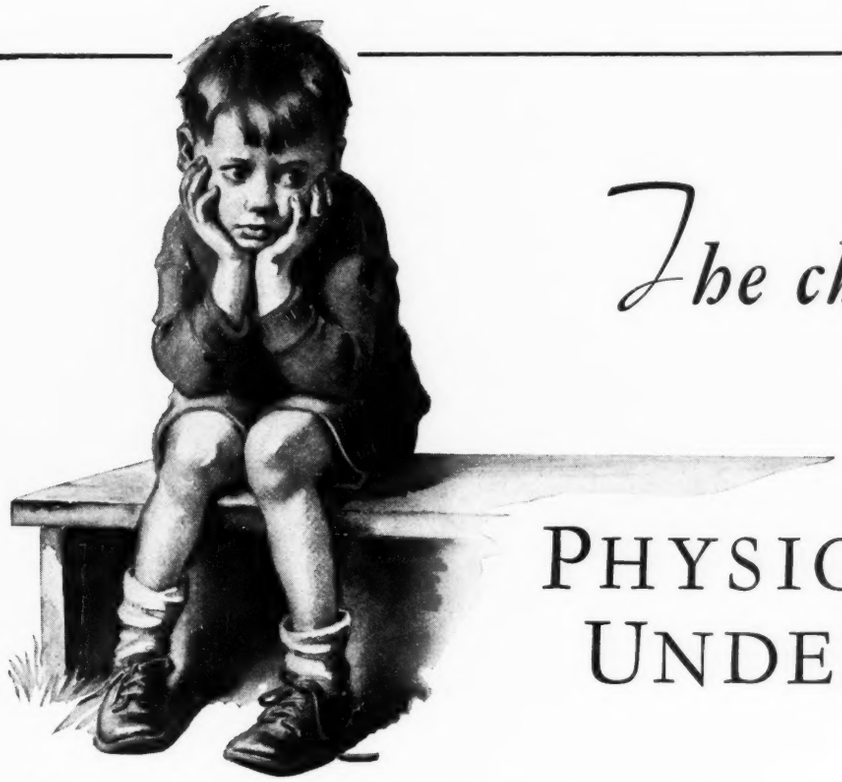


The child who is

PHYSICALLY UNDER PAR

Nothing is more tragic than the child who cannot keep up with his comrades at school or play! Doctors know that sluggishness, poor appetite, nervousness and irritability can frequently be traced to this one simple fact—the child's diet does not provide vitamin B in sufficient quantities to meet the needs of an active, growing body.

For this very reason, Ralston Wheat Cereal is now being widely recommended by physicians as an easy and effective means of correcting and preventing such deficiencies. For Ralston—the hot cereal children love to eat—not only supplies all the good of choice whole wheat (only coarsest bran removed), but in addition, is enriched with wheat germ in sufficient quantities to make it *2½ times richer in vitamin B than whole wheat.* Ralston, moreover, has the extra advantage of being a hot, quickly cooked cereal which costs less than one cent a serving. For FREE samples, and the Research Laboratory Report on Ralston Wheat Cereal, use the coupon below.

2½ Times Richer in Vitamin B

RALSTON *The Hot Cereal Children Love*

And for infants — Baby Ralston — the ideal starting cereal

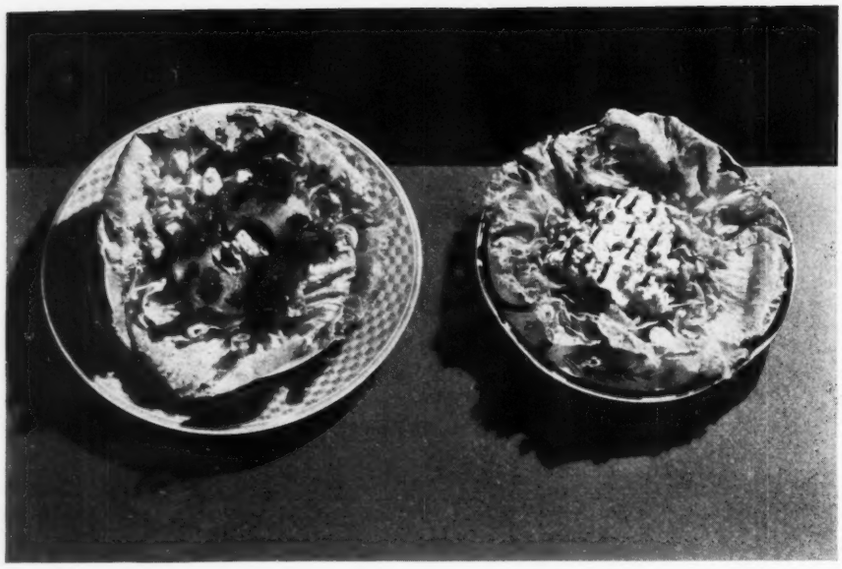
RALSTON PURINA COMPANY
Department MH, 137 Checkerboard Square, Saint Louis, Missouri

Please send me a copy of your Research Laboratory Report and samples of Ralston Wheat Cereal.

Name_____

Address_____

(This offer limited to residents of the United States)



Holly wreath salad and Christmas tree salad. The Christmas tree salad is made with cottage cheese trimmed with green and red candles made from strips of peppers. Mayonnaise is used for the candle flames.

time and thought to planning her Christmas menu and should make it as appetizing and colorful as possible. The menu planned this year for private patients at St. Luke's is given here. It will be used with only slight variations for the wards, staff and employees. Every patient and every employee will receive a red carnation at mealtime and the various dining rooms will be decorated with wreaths and poinsettias.

On the previous page are recipes for several of the dishes to be served.

Almost 800 Attend Meeting of American Dietetic Association

By Anna E. Boller

THE annual meeting of the American Dietetic Association held in Cleveland, October 27 to November 1, was a busy and absorbing session.

Seven hundred and ninety-eight people were occupied nearly every minute from early morning until late at night, the officers and the various committee members working into the "wee sma' hours" of the next day.

The Cleveland dietitians under the able chairmanship of Marie Hines, University Hospitals of Cleveland, had so perfectly coordinated all their efforts that the convention days, in spite of being so busy, were a constant joy to all in attendance.

The luncheons, dinners and teas were most unusual, the menus having been carefully supervised by Helen Mallory, of Mount Sinai Hospital, Cleveland, as a member of the local arrangements committee.

The program itself, planned by Mary Louise Bone, Starling-Loving Hospital, Columbus, O., was well rounded, combining instructive and valuable educational material, reports of association work, which will be helpful to the members and papers both unusual and informative.

Outstanding examples of the latter were those presented at the first general session under the title of "Dietetics in Foreign Countries." Katherine Heitshu, American Hospital in Paris; Helen S. Mitchell, Massachusetts State College; Lenna F. Cooper, Montefiore Hospital for Chronic Diseases, New York City, and Katherine Mitchell, Michael Reese Hospital, Chicago, talked on nutrition and foreign customs in France, Russia, Egypt and China, respectively.

Another paper of particular interest was that given by Dr. Morris Fishbein, editor, *Journal of the American Medical Association*, on "Food Fads and Fallacies." Doctor Fishbein made his usual plea for honest advertising in his own inimitable, entertaining way, and criticized food fads, urging that nutrition be placed upon a more normal basis.

Dr. William P. Murphy, Harvard Medical School, Boston, in his paper, "Deficiency States — Anemias," told of the various types of anemias and their causes. By means of slides he showed the relative value of various substances, such as whole liver and liver extracts, administered orally and intramuscularly, in the treatment of anemias.

Another deficiency disease, discussed by Dr. Donald J. Barnes, Detroit, was that of rickets. He gave an unbiased review of the literature and work that is now in progress.

Allergy Diets Discussed

An interesting paper was that presented by Dr. Charles Eyerman, Barnes Hospital, St. Louis, on "Allergy and Its Relation to the Dietitian," in which the present status of the allergy situation was given. This was followed by an "Allergy Dinner," over which Dorothy Duckles, Barnes Hospital, presided. Here several speakers presented types of foods and explained how these foods would fit into the allergy diet, together with reports on recent research work. They emphasized substitutions in the wheat-free and milkfree diets.

Dr. Henry John, Cleveland Clinic Hospital, Cleveland, discussed the subject in which he is so vitally interested—the treatment of diabetic children. He told about his interesting camp for these children.

Dr. William C. Rose, University of Illinois, talked about "The Significance of the Amino Acids in Nutrition." He discussed the importance of the individual acids and told of a new one. He stated that there are eight amino acids which are essential, and certain others which are not, while a third group is still being studied to ascertain whether or not they are essential.

Dr. T. Wingate Todd, Brush Foundation, Cleveland, presented an interesting discussion of "Food for Fitness." He compared the diet of over a hundred years ago with that of today, and brought out the changes wrought by modern living customs.

"World Wide Adventures in Nutrition" was the subject of Dr. Victor G. Heiser, New York City, who told of his extensive travels, particularly in the Philippines and the Orient. His discussion of the number of cases of beriberi which he encountered, and the splendid results obtained with a new source of vitamin C, obtained from pine needles, was absorbing.

The section meetings were organized into round tables, at which reports of the various committees were presented.

At the administration section meeting, "The Food Budget" was discussed, and figures presented which have been gathered over a period of several years. Faith McAuley is urging that hospitals keep more complete

How much Carbohydrate for the Formula?

Some physicians don't realize that Karo Syrup is Double-Rich in Calories compared with Powdered Maltose-Dextrins...so

Try this Saturation Test...

Add a little water to a level tablespoonful of powdered maltose-dextrin and warm over a Bunsen flame. The full tablespoonful of powder shrinks to about half a tablespoonful of syrup.

Karo Syrup contains twice as many calories as.....

Powdered Maltose-Dextrins, including Karo Powdered

KARO is already saturated with maltose-dextrins, which is why Karo is double-rich in calories. A tablespoonful of Karo Syrup yields approximately sixty calories while a tablespoonful of powdered maltose-dextrin gives approximately twenty-nine calories. In using Karo Syrup remember its double-caloric value. You may follow our Karo formulae devised by eminent pediatricians. But if you use those calculated for powdered maltose-dextrin, only half the number of tablespoonfuls of Karo Syrup are necessary to furnish the same caloric content of carbohydrate.

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records of their food costs. Other interesting studies were on "The Determination of Factors for the Conversion of the Items of the Food Ledger"; "The Yield of Standard Wholesale Cuts of Beef," in which the conclusion was drawn that the method of cooking definitely affects the yield, and that the percentage was greatest in the loin and round ends, and "Food Service Costs on Central and Floor Service in Hospitals," in terms of employee hours.

In each of the community education section reports, it was obvious that a great deal of material had been gathered and was available in the form of bibliographies and abstracts. In connection with the work of this section, there was an extensive educational exhibit which aroused a great deal of interest in all who attended.

The diet therapy section round table included reports on many subjects which are of particular interest to the therapeutic dietitian. The allergy diets were again presented, also the low cost special diets and a classification of meats by one committee and one of fruits and vegetables by another.

One item of great interest was the diabetic notebook suggested by Helen B. Anderson, Scripps Metabolic Clinic, San Diego, Calif.

The education of the dietitian and nurse occupied the round table of the professional education section. Numerous studies have been made by the home economics group on college courses, the student rating record forms, expenses and many other phases of the educational problem.

Luncheon and Dinner Meetings

In this connection, a luncheon was held for the heads of home economics departments in colleges, and heads of hospital dietary departments giving approved student dietitian courses, and presided over by Effie I. Raitt, president, American Home Economics Association. Here was an opportunity for those giving the preliminary training and those giving advance training to meet and discuss each other's problems, so that they might cooperate more fully in improving the training of this large professional group.

A dinner meeting was held for the directors of approved courses for student dietitians, over which Dr. Martha Koehne, inspection chairman, presided. This meeting provided an opportunity to discuss mutual problems and to develop a better appreciation of both the hospital viewpoint and the standards set up by the American Dietetic Association.

The food clinic course, for training those who are going into that field, was approved by the executive committee of the association. It is felt by many that this is a step forward in the profession.

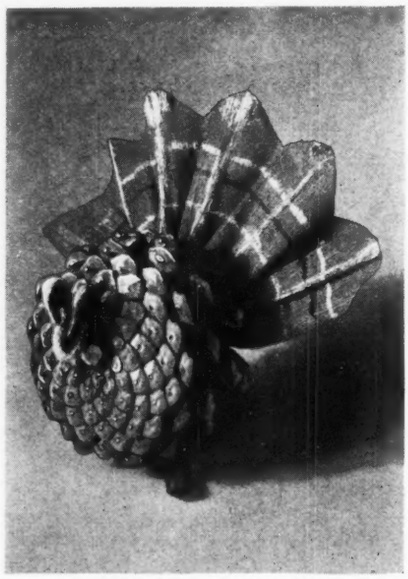
In the reports presented at the business meeting, the membership was announced as over 3,000, and it was brought out that thirty-one state associations are now affiliated with the national, which means much in strengthening the organization as a whole.

All those who attended felt with one accord that it was one of the nicest meetings the association has had, and that the committees were to be congratulated upon the smoothness with which the program was carried out from beginning to end.

Laura Comstock, Eastman Kodak Company, the president of the association, gracefully presided at the luncheon meeting and also took the chair at the business meeting, at the conclusion of which she turned the new gavel over to Katherine Mitchell, Michael Reese Hospital, Chicago, who succeeds her as president. Lute Troutt, Indiana University Hospital, Indianapolis, was chosen president-elect.

A Turkey for the Tray

The pine cone turkey shown here is an attractive and inexpensive Christmas tray favor. The head is made of a pipe cleaner dipped in red ink or some other red fluid and the feet of pipe cleaners dipped in coffee. The tail is of crêpe paper. This



attractive favor comes from Miss J. E. Trapp, head dietitian at the Orange Memorial Hospital, Orange, N. J. Miss Trapp also has a practical way of finding out the number of guest trays that will be served for Christmas day. This guest dinner request slip states that trays will be provided by the dietary department at $1.50 per plate, and it asks that the form ordering these trays be signed and sent in not later than December twenty-third.

FOOD FOR THOUGHT

• A series of nicely prepared articles on infant feeding are appearing under the heading "Protective Nutrition." In these bulletins, issued monthly, are found summaries of experimental work on feeding of infants as well as a rather extensive bibliography. If you have not seen them and are interested, let us tell you where you can obtain them.

• An interesting new booklet has been received, prepared by Dr. L. Jean Bogart, "The Dietary Uses of the Banana in Health and Disease." It contains many practical suggestions.

• Scurvy is on the increase according to reports from pediatricians. This disease which was thought to be ancient history is looming up during the depression. Children have been unable to get their Vitamin C from the favorite oranges or tomatoes. Dr. Thomas B. Cooley of the American Academy of Pediatrics suggested that freshly ground turnips, rutabagas or cabbage may be used as sources of this important vitamin.

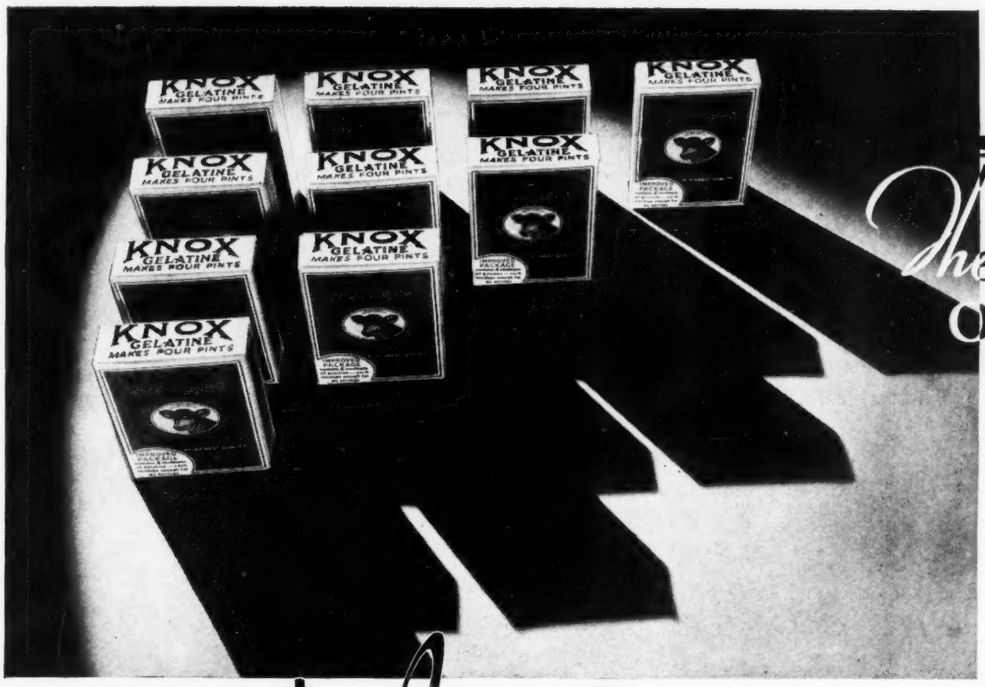
• Work has recently been done at the University of Wyoming by Emma J. Thiessen to determine the difference in cooking qualities of potatoes grown in dry land and in irrigated land. She found that those from the dry land cook faster than those from irrigated land.

• An interesting series of foreign menus and recipes have been gathered by the Cleveland Associated Charities. These are on the Italian, Hungarian, Polish and Negro diets and are known as "Eating in Different Languages" and may be obtained for five cents each.

• Many interesting new recipe books have been prepared by various commercial firms. The following are among the most attractive ones:

100 Honey Helpings
My Best Recipes
Rounding Out the Meal
The Heinz Salad Book
Carnation Cook Book
Aunt Jemima's Album of Secret Recipes

• Those who find it difficult to have attractive pie shells will appreciate the suggestion made by Lucy M. Maltby, home economics adviser for the Corning Glass Works, that a second pie plate be set into the pastry lined pie plate and baked together—the pie crust being sandwiched between the two pie plates. After baking, the top pie plate is removed leaving a shapely shell which has not changed its size or humped up in the middle.



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Protein (14 amino acids)	85.0—86.0%
Calcium Phosphate	1.0—1.25%
Fat (less than)	0.1%
Moisture	13.0—14.0%
Carbohydrate	Nil

Of interest in the treatment of muscular dystrophy is the 25% glycine (amino-acetic acid) in Knox Gelatine.

Bacteriologically safe . . . almost neutral pH . . . odorless . . . free from carbohydrates . . . exceeds in quality minimum U.S.P. standards.

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In Gastric Ulcer GELATINE U.S.P.

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IN Gelatine U.S.P., the gastric ulcer patient has a nutritious food which is compatible with his restricted diet, congenial to his taste and welcome in the tempting variety of appetizing dishes which it affords.

Knox Sparkling Gelatine surpasses in all respects the minimum U.S.P. standards of purity. Its fine texture and rapid solubility promote prompt assimilation, with an absence of irritation to inflamed mucosa. It soothes and aids healing.

Prescribed diets can safely utilize the added protein content of Knox Gelatine for the convalescent, tuberculous, diabetic or post-operative patient. Quite a remarkable product—Knox Gelatine . . . made as carefully as an ampule solution.

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Name.....

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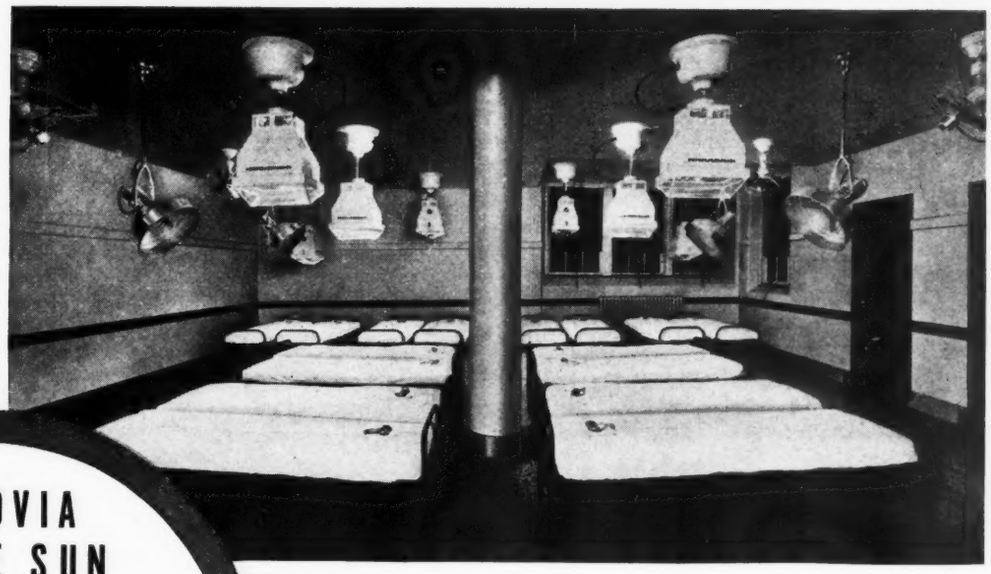
January Dinner Menus for the Staff*

By Helen Mallory

Chief Dietitian, Mount Sinai Hospital, Cleveland

Day	Meat or Substitute	Potato	Vegetable	Salad or Relish	Dessert
1.	Roast Turkey, Dressing, Cranberry Sherbet	Mashed Potatoes	Spinach	Spiced Apple Ring	Plum Pudding, Hard Sauce
2.	Roast Lamb	Parsley Potatoes	Candied Carrots	Jellied Relish	Mint Ice Cream, Chocolate Sauce
3.	Baked Fish	Mashed Potatoes	Green Beans	Head Lettuce, Thousand Island Dressing	Raisin Pie
4.	Baked Ham	Browned Potatoes	Creamed Cabbage	Green Salad	Lemon Pudding
5.	Broiled Steak	Sweet Potatoes	Buttered Celery	Marshmallow Salad	Strawberry Ice Cream
6.	Roast Beef	Hashed Brown Potatoes	Harvard Beets	Chef Salad	Steamed Chocolate Bread Pudding, Hard Sauce
7.	Breaded Veal Chops	Creamed Potatoes	Buttered Onions	September Relish	Apple Pie
8.	Broiled Meat Cakes	Baked Potatoes	Stewed Tomatoes	Pineapple Salad	Chocolate Ice Cream
9.	Broiled Lamb Chops	Escalloped Potatoes	Baked Hubbard Squash	Curly Endive, French Dressing	Steamed Fig Pudding, Lemon Sauce
10.	Stuffed Baked Fish	Mashed Potatoes	Buttered Peas	Orange and Apple Salad	Lemon Sherbet
11.	Breaded Veal Chops	Parsley Potatoes	Mashed Turnips	Celery and Olives	Cherry Tarts
12.	Roast Beef	Browned Potatoes	Cauliflower	Carrot Relish	Vanilla Ice Cream, Caramel Sauce
13.	Meat Loaf	Potatoes Au Gratin	Spinach	Banana Salad	Butterscotch Pie
14.	Roast Pork	Mashed Sweet Potatoes With Marshmallows	Applesauce	Head Lettuce, French Dressing	Pineapple Mint Ice Cream
15.	Roast Veal, Dressing and Gravy	Parsley Potatoes	Buttered Carrots	Green Salad	Caramel Sponge
16.	Chow Mein			Head Lettuce and Tomatoes, French Dressing	Lemon Sherbet
17.	Broiled Ocean Whitefish, Tartar Sauce	Mashed Potatoes	String Beans	Jellied Grapefruit Salad	Lemon Pie
18.	Roast Beef With Gravy	Baked Potatoes	Creamed Corn	Carrot Relish	Frozen Strawberries and Cookies
19.	Breaded Veal Chops	Mashed Sweet Potatoes	Broccoli, Hollandaise Sauce	Cranberry Salad	Peach Ice Cream
20.	Stuffed Flank Steak	Creamed Potatoes	Buttered Celery	Head Lettuce, Thousand Island Dressing	Cherry Pie
21.	Pork Chops	Escalloped Potatoes	Buttered Carrots	Pineapple and Cabbage Salad	Marshmallow Cream
22.	Broiled Steak	Mashed Potatoes	Buttered Onions	Curly Endive, Roquefort Dressing	Fruited Rice Fluff
23.	Baked Ham, Horseradish Sauce	Au Gratin Potatoes	Buttered Turnips	Celery and Olives	Pumpkin Pie
24.	Fillet of Haddock	Escalloped Potatoes	Wax Beans	Tomato Aspic Salad	Apricot Ice Cream
25.	Breaded Veal Chops	Parsley Potatoes	Baked Squash	Coleslaw	Paradise Pudding
26.	Chicken Fricassée With Biscuits	Mashed Potatoes	Spinach	Apple Relish	Vanilla Ice Cream, Butterscotch Sauce
27.	Roast Beef	Baked Potatoes	Fried Parsnips	Head Lettuce, Thousand Island Dressing	Chocolate Marshmallow Roll
28.	Pork Chops	Creamed Potatoes	Lima Beans	Green Salad	Apricot Tarts With Whipped Cream
29.	Individual Veal and Pork Pie With Vegetables			Celery Hearts and Raw Carrots	Maple Nut Ice Cream
30.	Roast Lamb, Mint Jelly	Escalloped Potatoes	Buttered Peas	Head Lettuce With Grated Raw Carrots	Butterscotch Pie
31.	Salmon Steak	Baked Potatoes	Escalloped Tomatoes	Apple and Raisin Salad	Cherry Cobbler With Whipped Cream

*Recipes for any of the foregoing dishes will be supplied on request by Anna E. Boller, THE MODERN HOSPITAL, Chicago.



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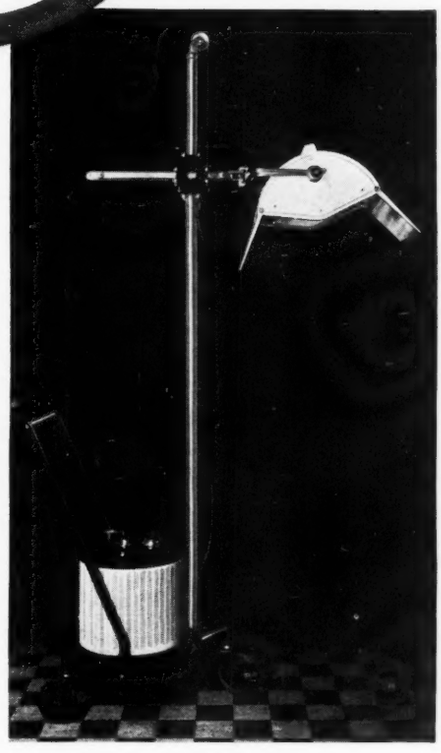
Including eight Super Alpine Sun Solarium Lamps and Four Sollux Solarium Lamps.

Every hospital and sanatorium should consider the ultraviolet solarium as an essential adjunct for the benefit of patients.

A Solarium, equipped with Hanovia Super Alpine Sun and Sollux Lamps, reduces demands on hospital personnel to a minimum, particularly in view of the possibility of multiple irradiations which may be given a number of patients concurrently.



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Special Hospital Model

THIS Lamp—because of its extreme mobility—fills a great need in all hospitals and has met with the approval and endorsement of hospital authorities everywhere.

Its perfect balance, stability of light arc, and exceptional portability make it ideal for ward work, and ultraviolet application to bedridden patients.

The Hospital Type carriage is rigidly bolted to the base, which is fitted with three rubber-tired, ball-bearing 5" casters—two, straight stemmed and fixed, the other swivelled.

The clearance under the base is amply sufficient for movement over a 1½" door-sill.

The quartz-mercury arc burner is of sufficient intensity to produce a first-degree erythema on the average person after an exposure of 30 seconds, at a distance of 30" from the burner to the patient.

This model offers the following advantages: Lessened treatment time . . More patients treated . . Low cost of operation.

Following are a few of the many institutions using the New Super Alpine Sun Solarium Lamps:

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Central State Hospital, Indianapolis, Ind.
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Hospital for Crippled Children, St. Paul, Minn.
Kosair Crippled Children's Hospital, Louisville, Ky.
Meadowbrook Hospital, East Meadow, Long Island
Metropolitan Hospital, Welfare Island, N. Y.
Newark City Hospital, Newark, N. J.
New England Deaconess Hospital, Boston, Mass.
N. J. Sanatorium for Tuberculous Diseases, Glen Gardner, N. J.
New Jersey State Hospital, Greystone Park, N. J.
Pittsburgh Skin & Cancer Foundation, Pittsburgh, Pa.
Saratoga Spa, Saratoga Springs, N. Y.
U. S. Marine Hospital, Norfolk, Va.
U. S. Marine Hospital, Seattle, Wash.
Utica State Hospital, Utica, N. Y.
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NEWS IN REVIEW . . . .

A. C. S. Meets in San Francisco; 2,266 Hospitals on Approved List

Despite the noted hospitality of San Francisco and the beautiful California sunshine, the eighteenth annual hospital standardization conference of the American College of Surgeons, opening in San Francisco on the morning of October 28, lost no time in getting down to the serious business of the convention. After brief opening remarks by Dr. Robert B. Greenough, president of the American College of Surgeons, and short addresses of welcome by Dr. J. C. Geiger, San Francisco's director of public health, and Dr. Leon M. Wilbor, superintendent, San Francisco Hospital, the meeting at once turned to the business of the convention.

Dr. George Crile, chairman of the board of regents of the American College of Surgeons, was the first speaker, telling the members of the hospital standardization movement of the American College of Surgeons and placing special emphasis on the fine work of Dr. Malcom T. MacEachern in bringing such a large number of hospitals up to the standards required by the college.

Approved List Analyzed

In the 1935 hospital standardization survey a total of 3,565 hospitals were investigated and 2,266 fully approved and 257 provisionally approved. The 2,523 fully or provisionally approved is an increase from 2,480 in 1934. The percentage approved varied by size as follows in the 1935 survey: hospitals of 100 beds or over, 94.8 per cent approved; hospitals of 50 to 99 beds, 65.8 per cent approved; hospitals of 25 to 49 beds, 27 per cent approved; Federal hospitals are all approved but one. Thirty-three hospitals in other countries were approved in 1935.

Dr. LeRoy Long, Oklahoma City, Okla., spoke on "The Integrity of the Medical Profession," emphasizing strongly that a doctor's education was not only professional but that his moral, legal and social responsibility was of equal importance. He stressed the fact that the practice of medicine should not be considered only with an eye to economic gain, but with the thought of service to humanity ever uppermost.

Sister John Gabriel, Seattle, Wash., again pointed out the need of some sort of a pay-as-you-go plan to preserve the self-respect of the low income group and to provide some security for the voluntary hospital. She emphasized the thought that during the recent years of depression, the voluntary hospitals have given generously of their service with no assistance whatsoever from the government or any other source.

A paper and demonstration of oxygen therapy with slides to illustrate the use and administration of oxygen through the nasal cavity by the use of catheters was given by Dr. R. C. Buerki, president, American Hospital Association.

Voluntary Hospitals Discussed

The morning meeting closed with a spirited talk by Robert Jolly on the future of the voluntary hospital in which he stated that "Californians should be proud of their sunshine and oranges, but very much ashamed of taxing the voluntary hospitals"; and a discussion by Dr. Frederic A. Besley, Waukegan, Ill., who declared that it was imperative that the voluntary hospitals keep their credit standing in their communities and urged that every effort be made to meet current expenses promptly.

The afternoon session on Monday was given over to a study of the different departments of the hospital of today, bringing out in a concise manner the functions and aims of the hospital trustee, the hospital administrator, the medical staff member, clinical pathologist, radiologist, nurse, dietitian, medical educationist and economist.

On the Tuesday morning program the panel discussion was conducted by the chairman, Joseph G. Norby, Minneapolis, who kept a true panel spirit throughout the discussion.

A joint meeting with the Association of Record Librarians of North America was held on Wednesday and the importance of medical records to the doctor, the patient and the hospital was brought out by the speakers. According to Doctor MacEachern, among the hospitals now listed with the American College of Surgeons the greatest trouble is found with the medical records. He further stated that the college is "tightening up" on their requirements and will continue to tighten more as the time goes on. He stated that a record system should be simple, but that the record of the patient should be complete and contain the essential facts for diagnosis.

A visit to Oakland occupied Thursday, the morning session being held at Providence Hospital. Sister John of the Cross of that hospital told those in attendance of the many small savings possible in the administration of a hospital, which when measured in the aggregate were of considerable importance. The management of the housekeeping department was discussed by Allice Eldridge, Fairmont Hospital, San Leandro, Calif., and Marguerite Spires, medical social worker, Alameda County Hospital, Oakland, gave an interesting survey of the functions of the medical social service department.

Peralta Hospital was host to the delegates at a luncheon at which F. S. Warswick, personnel director, emphasized the importance of the correct personalities in the hospital for those coming in contact with the general public.

The afternoon session was held at the Samuel Merritt Hospital where the "Admission and Discharge Procedure" was uniquely presented in the form of a skit showing the problems to be met in the course of a day at the registration desk of any voluntary hospital. May Hassett, assistant director of nursing of the Merritt Hospital, presented a demonstration showing the advantages of a well organized central supply room. Benjamin T. Howiler, pharmacist, Peralta Hospital, discussed the hospital formulary from the standpoint of hospital administration. The session was closed with a round table conference on group hospitalization, conducted by C. Rufus Rorem, Julius Rosenwald Fund, Chicago.

Thursday closed the regular sessions of this convention, but those who remained over until Friday were taken on a tour of the Alameda County Institutions.

Dr. Eugene H. Pool of New York City was chosen president-elect of the college.

Celebrates Anniversary

The fiftieth anniversary of the organization of the society which was responsible for the development of the Norwegian-American Hospital of Chicago was celebrated at the hospital on November 4. A dinner was attended by members of the board of trustees, the medical staff, the Norwegian-American Hospital Society and other friends of the hospital. Dr. Ernest E. Irons, dean, Rush Medical School, Chicago, was the principal speaker. He paid particular tribute to the fine educational work of the hospital carried out through daily staff conferences.

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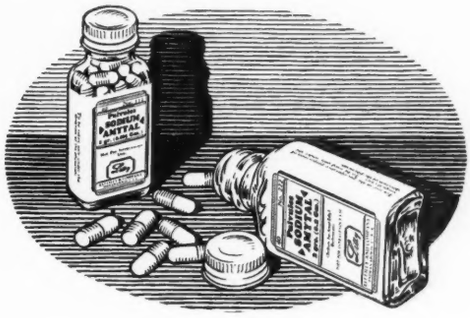

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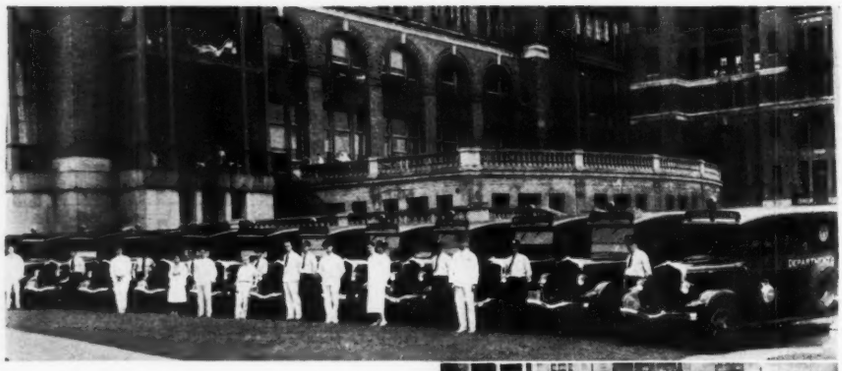

N. Y. C. Ambulances Answered 361,536 Calls in 1934

New ambulances recently put into service by the New York City Department of Hospitals represent the latest development in this type of conveyance. Equipped with four-wheel brakes and shatterproof glass, and all modern appliances and conveniences they present a marked contrast to the horse-drawn vehicles of half a century ago which used to clatter down the streets.

In 1870 in New York, there were five ambulances in operation. They responded to 1,812 calls during the year. In 1934, the department of hospital's 74 ambulances combined with 73 others maintained by the department at private hospitals, making a total of 147 ambulances, answered 361,536 calls.

The world's first ambulance service was inaugurated at Bellevue Hospital in June, 1869. Colonel Edward B. Dalton, a surgeon in the Civil War, first conceived the ambulance idea as a necessity in caring for the emergencies of the battlefield. Later in civilian life, when he became visiting surgeon at Bellevue Hospital, he saw a similar necessity for some sort of vehicle with a doctor in attendance for emergency cases requiring quick hospitalization, and was instrumental in establishing the service at Bellevue.

$88,000 to Harrington Hospital

A stringless trust fund amounting to slightly more than $88,000 has been received by the Harrington Memorial Hospital, Southbridge, Mass. Created by the late Nelson M. Baker, the fund will provide the hospital with about $4,500 a year to be used, according to the will, for hospital purposes. The income will be paid to the institution monthly, and the first payment was made during November. The fund will be known as the Nelson M. Baker and Georgianna Baker trust fund. According to hospital authorities, the fund will materially reduce the annual deficit, which amounts to the sum of $25,000.

Merger of Two N. Y. C. Hospitals Announced

The election of seventeen members of the board of trustees of the New York Homeopathic College and Flower Hospital to the board of the Fifth Avenue Hospital was the first definite step in the establishment of a merger between the two institutions, the result of months of negotiations.

For the present time, the Fifth Avenue Hospital building will be used jointly by both institutions under one administrative management which will carry out the chartered provisions of both. The Fifth Avenue Hospital, which is nonsectarian, will continue to be so. The building, erected in 1922, has a potential bed capacity of 500, but, because of the need for utilizing floors for nurses' quarters, the hospital operated only 285 beds. The scheduled erection of a nurses' home will provide ample opportunity for expansion to both institutions.

Charles D. Halsey, president of the board of the New York Homeopathic College and Flower Hospital, was elected president of Fifth Avenue Hospital following the resignation of H. E. Manville. David Q. Hammond, executive vice president of New York Homeopathic College and Flower Hospital since 1930 and superintendent of Flower Hospital since 1932, was elected superintendent of Fifth Avenue Hospital.

It is believed that the adopted program will strengthen the educational program of Flower Hospital, and both staffs will benefit by further teaching opportunities and research. Flower Hospital will be given the chance to conserve its assets with the view to erecting new college buildings. The names of both hospitals will appear on the building.

Novel Hospital Report Written by Fannie Hurst

With the celebration of its fiftieth anniversary a recent event, Montefiore Hospital for Chronic Diseases, New York City, wishing to publish a report on the activities of the institution interesting enough to be read, invited Fannie Hurst to visit the hospital and write her impressions.

"Fannie Hurst Visits Montefiore" is a thirty-six-page pamphlet, bound in brown with Miss Hurst's picture on the cover. Beautifully illustrated, with six full page photographs, four of which are camera studies of patients, and many smaller pictures, the booklet manages to give its financial report and make its plea for funds for beds, x-ray and physical therapy equipment, fellowships and its outpatient department without ever making it read like the average report.

Miss Hurst's comments on the hospital are those of a humanitarian. She notices and applauds the lack of a "hospital smell"; she feels the completeness of Montefiore as a unit within itself, providing the patients with their own newspaper, movies, library, store and work in the form of occupational therapy. She discovers that the dietetic department doesn't serve stewed apricots to patients who dislike them, and she was impressed above all, by the spirit of cheerfulness, hope and expectancy noticeable among the patients.

Dr. S. S. Goldwater, who has been conducting a campaign in New York City for the care of the chronically ill, has written the foreword, and Dr. David Marine, chief of the laboratory division, has reviewed the research work carried on by the hospital.

Bulletin Issued by New Secretaries Conference

The recently organized Secretaries Conference, composed of executive secretaries of hospital associations in the United States and Canada, has just issued the first number of its bulletin, American Secretaries.

A. E. Hardgrove, assistant executive secretary, American Hospital Association, is chairman of the conference. Howard E. Hodge, former superintendent, Decatur and Macon County Hospital, Decatur, Ill., is vice chairman and Albert G. Hahn, administrator, Protestant Deaconess Hospital, Evansville, Ind., is secretary.

A committee headed by Carl Wright, superintendent, General Hospital, Syracuse, N. Y., assisted by John Hatfield, superintendent, Pennsylvania Hospital, Philadelphia, and Dr. G. Harvey Agnew, department of hospital service, Canadian Medical Association, was appointed to arrange state convention dates in order to avoid conflicting meetings.

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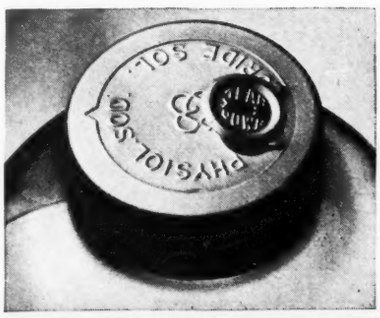
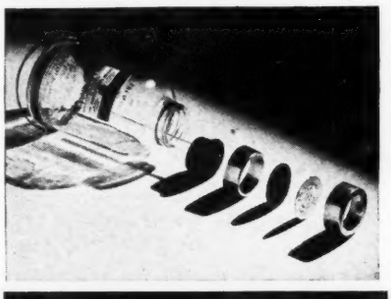


Unretouched photograph showing Baxter's new tamper-proof, metal seal.



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. . . Baxter's New, Metal Tamper-proof Seal

Your intravenous solution problems engage the attention of Baxter technicians every day in the year. Now, after a year of experimenting with *all* types of closures, Baxter is the first to offer you the *best* . . . a new tamper-proof metal seal that is easily removed and actually simplifies the technique of preparing for administration.

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NEW BUILDING PROJECTS

AUBERRY, CALIF. — Federal funds amounting to $60,000 have been allocated for the erection of a unit for the care of tuberculous Indians at the Wish-i-ah Sanitarium.

STOCKTON, CALIF. — A new x-ray department is to be installed on the first floor of the Dameron Hospital and $15,000 will be spent in improving, modernizing and purchasing new equipment. The department's present quarters will be remodeled into private rooms.

MARSHALLTON, DEL. — Three stories of a proposed five-story administration and infirmary building are being built at Brandywine Sanatorium with funds from the $150,000 appropriation made by the state legislature. Further funds will have to be raised before the remaining two stories can be added, but the present addition will add fifty beds to the capacity of the institution.

STATESBORO, GA. — Construction on the new three-story, $60,000 hospital is scheduled to begin this month. The basement floor plans include a classroom, laundry, dining room, kitchen and section for colored people. On the first floor are the business office, staff room, guest room, wards, laboratory, solarium and x-ray laboratory. The operating rooms, the pharmacy and the private rooms are on the second floor. W. H. Aldred, Jr., Statesboro, is the architect.

CHICAGO, ILL.—Approval for the construction of a $50,000 Roman Catholic chapel on the grounds of the Chicago Municipal Tuberculosis Sanitarium grounds with funds supplied by F. J. Lewis, retired Chicago capitalist, has been recommended by the city council on finance, according to a recent announcement. The chapel is to be erected as a memorial to Mr. Lewis' first wife, who died several years ago.

MURRAY, KY.—The William Mason Memorial Hospital, destroyed by fire last February at a loss of over $100,000, is now being replaced by a two-story fireproof building, English in appearance.

PARAMUS, N. J. — Plans have been completed for the $430,000 administration building to be erected at Bergen Pines, the county isolation hospital. The four-story brick building will contain the hospital administration offices, operating and x-ray rooms and quarters for staff members. It is being financed by $190,000 from the PWA and $240,000 from Bergen County.

ONEIDA, N. Y. — Reversing a vote taken last June the citizens approved a new city hospital to be built with a $99,000 federal grant and a bond issue of $121,000. The new institution will do away with the Broad Street Hospital and the Oneida City Hospital, it is planned.

MORGANTOWN, N. C. — Two buildings, each with accommodations for fifty persons, one for women pellagra patients, the other for men, and a third building, large enough to accommodate 150 mentally ill patients are going under construction at State Hospital this month. The additions are being financed at an outlay of $222,000, a portion of a state bond issue and federal funds amounting to 45 per cent. Improvements are to be made at State Hospital, Raleigh, and at State Hospital, Goldsboro, at the same time.

PRINCE ALBERT, SASK. — A $70,000 wing is under construction at the Holy Family Hospital.

CARROT RIVER, SASK.—The Mitchell Memorial Hospital of the United Church of Canada was formally dedicated on October 23. Of wood construction, it is 30 by 34 feet, with a cement foundation, and is so laid out that expansion will be a simple matter. At present it has a capacity of five beds.

CODETTE, SASK. — The newly completed annex of the Lady Grey Hospital enlarges the bed capacity of that institution to fourteen.

NORTH BATTLEFORD, SASK.—A two-story brick addition and repairs to the heating system, new water mains, and the installation of a new sewage disposal plant are among the improvements being planned for the Mental Hospital.

WAIAKOA, T. H. — A new building for the Kula Sanitarium is being financed by a federal grant of $227,510 and an additional sum of $250,000 to be obtained through the sale of Maui County bonds. The structure, designed by C. W. Dickey, Honolulu, will be four stories high and equipped as a hospital for the tuberculous.

SALT LAKE CITY, UTAH. — Holy Cross Hospital recently completed the installation of a new kitchen, equipped with all modern facilities. The Latter Day Saints Hospital is constructing a new, enlarged pediatric department. Glass partitions will be used so that nurses may view the various wards of the department and so that children may be isolated upon admission to eliminate the possibility of spreading contagion.

Harlem Hospital to Open New Unit in January

With the opening of its new women's building scheduled for January 2, the total bed capacity of Harlem Hospital, New York City, will be increased from 325 to 677. Among other improvements made in this institution during recent months is a new kitchen. The hospital's dispensary has also been improved and is to be enlarged in the near future.

Persistent efforts have been made, according to Dr. S. S. Goldwater, hospital commissioner, to obtain support for an increased nursing staff at Harlem Hospital and thus to improve bedside care. "In its budgets for 1935 and 1936," Doctor Goldwater explains, "the department stressed the need for a larger nursing force in all the city's hospitals, and in spite of the need for rigid economy the Board of Estimate allowed part of the request.

"Every phase of the service at Harlem Hospital is being studied, to some purpose. Plans have been drawn under WPA auspices for an adequate emergency and receiving ward and the department is sponsoring WPA projects for expanding and modernizing the x-ray department, the division of physiotherapy, the pathologic laboratories and certain medical services, including tuberculosis. Funds have also been provided for a new nurses' home which will contain 216 rooms."

Cornerstone Laid

An audience of 2,500 witnessed ceremonies attending the laying of the cornerstone of the Roosevelt Hospital at Roosevelt Park, Raritan Township, N. J. Included in the ceremonies was an address by Dr. Kendall Emerson, managing director of the National Tuberculosis Association. The hospital is being erected by Middlesex County for tuberculous patients at a cost of $700,000. It will have a bed capacity of 200 and according to present plans will be completed in May, 1936. John Noble Pierson & Son, architects, Perth Amboy, N. J., drew up the plans.

Lenox Hill Secures Property

Negotiations are nearing completion whereby the Lenox Hill Hospital, New York City, will assume possession of the northwest corner of Lexington Avenue and Seventy-Sixth Street. This will give the institution control of the block between Lexington and Park Avenues, Seventy-Sixth and Seventy-Seventh Streets. It is understood that the site will be used for a hospital wing to be erected in memory of Mrs. Flora Straus Einhorn. Doctor Einhorn is on the staff of the hospital and is a leading gastro-enterologist.

Crane Continuous Flow Bath for HYDROTHERAPY

The Crane Continuous Flow Bath is designed for the utmost comfort of the patient. It affords uniform water temperature within one-half degree Fahrenheit throughout, which meets the most exacting requirements in the treatment of many selected cases, so necessary to attain the desired results in advancing recovery of the patient.

This bath is but one of several Crane fixtures particularly designed for the Hydrotherapy Department—one of the hospital's most promising sources of income and in which the cost of equipment is readily amortized.

The Crane Finance Plan is available to any hospital desiring to spread the cost of new equipment over a period of years. Call the nearest Crane branch or write for full information.

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Mount Sinai Hospital Gets Fund for Convalescents

A bequest of more than $1,300,000 goes to Mount Sinai Hospital, New York City, from the estate of Bertha Weinman. This sum is to establish the Moses Weinman fund for the care of convalescents in memory of Miss Weinman's brother. In addition to the residue, the hospital will receive $10,000 after the death of a cousin, Albert Spaeth of Munich, Ger. Other hospitals benefiting in Miss Weinman's will are St. Vincent's Hospital and Presbyterian Hospital of the same city, each of these institutions receiving $2,500.

This is the second bequest which Mount Sinai has received lately for convalescent care. The residue of the estate of Edward J. King of New York City, goes to the hospital to be used to establish a permanent convalescent fund in memory of his wife and himself. In addition, Mr. King specified outright bequests of $18,000 to charitable institutions and contingent remainder bequests totaling $830,000 to Mount Sinai. Among the outright bequests were $5,000 to Lenox Hill Hospital, New York City, and $3,000 to Trudeau Sanatorium, Trudeau, N. Y.

Construction on Newark's New Hospital to Start Soon

Construction of the new $3,000,000 City Hospital at Newark, N. J., which the federal government recently approved will start not later than December 15, it is reported. The federal government will contribute 45 per cent of the funds.

There will be a main building of twenty-one stories, wings of seven stories and connecting wings of nine stories each. It is the plan of the architect, Frank Grad, to begin construction of the two seven-story wings. They will be built on land adjoining the present hospital building. After the wings are finished the patients will be moved into them from the old hospital building, which will be razed.

When completed the hospital will accommodate 1,000 patients, which is double the normal capacity of the present one. It is expected that the hospital will be finished within a year, as one of the provisions of the federal grant is that it must be completed within that time or the city will have to forego the payment of whatever balance there is of the federal grant at that time.

Architect's drawing of Newark's proposed new city hospital.

Arkansas Group Meets at Hot Springs

As the result of a decision reached last spring at the annual meeting of the Arkansas Hospital Association, the organization met at the Leo N. Levi Memorial Hospital, Hot Springs, on November 15, and inaugurated its new program of two meetings a year.

Edward S. Fee, state compensation officer, Works Progress Administration, addressed the meeting on "hospital care given compensation cases under the WPA," and B. C. Powell, public relations officer of the Federal Housing Administration discussed government aid to hospitals.

"What the press expects from the hospitals in the way of information and what the hospitals may expect from the press in the way of publicity," was the subject of the talk given by Charles Goslee, past president of the Arkansas Newspaper Association. Lee C. Gammill, superintendent, Baptist State Hospital, Little Rock, closed the meeting with a report on the work of the legislative committee, of which he is chairman.

Joins Housekeepers' Association

In addition to hospital housekeepers already active in the Atlantic City, N. J., chapter of the National Executive Housekeepers Association is Mrs. Madeline Case. Mrs. Case is housekeeper of the Atlantic City Hospital.

Article Outlines New Duties of Hospitals

From 50 to 80 per cent of the ward and clinic patients of private hospitals are on government relief, according to an article, "Medicine Plus" in the current issue of *Federation Illustrated*, published by the Federation for the Support of Jewish Philanthropic Societies.

This has made it necessary for hospitals to extend their responsibilities beyond the traditional care. Medicine plus means, according to the article, not only medical and surgical service, but that "milk, eggs, and other essentials for convalescence follow patients into the homes."

The seven Federation institutions are Beth Israel Hospital, Hospital for Joint Diseases, Jewish Maternity Hospital, Lebanon Hospital, Montefiore Hospital for Chronic Diseases, Montefiore Hospital Country Sanatorium and Mount Sinai Hospital, New York City.

Chooses New Officers

The Kansas State Hospital Association held its twenty-first annual meeting at Emporia, Kan., on Saturday, October 26, and elected the Rev. J. E. Lander, Wichita, president, and Dr. J. T. Axtell, Newton, secretary-treasurer. Papers were read on hospital laundries, the eight-hour nursing day, private hospitals, and the cooperation of staff and hospital, by Isabel M. Patton, Atchison Hospital, Atchison, Irma Law, Wesley Hospital, Wichita, Norman J. Rimes, Christ's Hospital, Topeka, and Dr. Phil Morgan, Emporia. It was decided to hold the 1936 meeting at McPherson, on the last Saturday in October.

Ohio Groups Plan Convention

The twenty-second annual convention of the Ohio Hospital Association will be held in conjunction with the Ohio Dietetic Association, the Ohio Association of Medical Record Librarians, the Ohio Nurse Anesthetists' Association, the Hospital Obstetric Society of Ohio and the newly organized Ohio Physiotherapists Association, in Columbus, April 14 to 16.

Town Gets First Hospital

A large home in Algona, Wash., is being remodeled as a hospital and maternity home, the first the town has ever had. The large, nine-room house selected will provide six rooms for patients, according to the plans, and will be completed by December 1. Mrs. Lydia A. Knowles is to be in charge of the hospital.

TIMES DO CHANGE!

There was a time, doubtless, when the attire of the gentleman in the picture would have been admired as the very latest thing. There was a time, also, when it would have been considered good management to polish or scrub floors by hand methods. But not now! The question is no longer, "Does mechanical floor maintenance pay?"

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OF FLOOR MAINTENANCE

Insurance Commissioner to Control Non-profit Associations in California

At the last session of the California legislature, Governor Merriam signed a bill to regulate the formation and operation of nonprofit hospital service associations and to put them under the control of the commissioner of insurance. This bill was drafted by the San Francisco Hospital Conference with the support and approval of voluntary hospitals throughout the state.

The immediate result of the passage of this much discussed bill was the formation of a committee by the Association of California Hospitals to investigate and prepare plans and a report. This committee is under the chairmanship of Dr. Howard H. Johnson, superintendent, St. Luke's Hospital, San Francisco. Several sectional associations are in process of formation covering San Francisco, the East Bay counties and Southern California.

Sacramento and adjacent towns have operated an association for the past four years under the name of Superior California Hospital Association, and in Santa Clara County the Associated Hospitals Service Fund has operated such a group for the past two years. At the instance of the committee the Santa Clara County group has extended its service to include the four adjacent counties, namely, San Mateo, Santa Cruz, Monterey and San Benito. This expansion brings into the Associated Hospitals Service Fund a total of thirteen hospitals from San Mateo to Carmel.

The Superior Hospital Association at Sacramento and the Associated Hospitals Service Fund have entered into a reciprocal agreement to accept members from either group for the full period of twenty-one days' hospitalization. It is probable that like reciprocal agreements will be arranged between the other associations to be formed throughout the state.

The annual audit of the Associated Hospitals Service Fund for its second year of business closing May 31, 1935, indicates that 50.4 per cent of its gross collections was used for hospital service for its members at an average cost of $40.95 per member. Membership increased at the rate of one new member a day.

This slow growth is accounted for by the fact that there are no large industrial groups in Santa Clara County. This is true also of the counties of San Mateo, Santa Cruz, Monterey and San Benito which are now added to the territory covered by the association.

Members are for the most part employed individuals and their families. The largest group of scattered workers is the teachers, nurses ranking second and doctors and their families third. It is anticipated that with the expansion of the association into these adjacent counties the membership will at least double in the next twelve months. The hospitals and the medical profession in these counties are keenly interested in building up membership in their communities.

Individuals and single families are accepted, the rate being $1 a month for the first and $0.75 a month for each additional member, with a $1 application fee for an individual or an entire family.

British Columbia's Health Insurance Plans Formulated

For the purpose of collecting the opinions of the general public on the draft bill of compulsory health insurance for British Columbia issued by Dr. G. M. Weir, the provincial secretary, in March of this year, the provincial government recently appointed a committee to hold public hearings at key centers throughout the province.

The members on this committee include: Dr. Allon Peebles, adviser on health insurance to the provincial government, chairman; E. W. Neel, president, British Columbia Hospitals' Association; Grace Fairley, superintendent of nurses, Vancouver General Hospital; Dr. A. Grant Fleming, Department of Public Health and Preventive Medicine, McGill University; P. R. Bengough, and J. H. McDonald. The consultants on this committee are Dr. A. K. Haywood, superintendent, Vancouver General Hospital; Dr. H. M. Cassidy, director of Social Welfare for British Columbia; G. T. Cunningham; C. F. Davie; Dr. J. J. Gillis; Dr. R. L. Pallen; Mrs. Helen Douglas Smith; E. S. H. Winn, and Dr. H. E. Young.

Hearings have been conducted at eighteen points in the province, including Vancouver, New Westminster and Victoria. Representations were made to the committee by over a hundred organizations and individuals, some of the more important being: the British Columbia Hospitals' Association, the council of the College of Physicians and Surgeons of British Columbia, the Registered Nurses' Association of British Columbia, the Pharmaceutical Association of British Columbia, trades and labor councils, parent-teachers' associations, women's associations, fraternal organizations, boards of trade.

On the basis of the recommendations made to the provincial secretary by the hearings committee after full discussion of the suggestions made by the public, the draft bill of health insurance will be revised before it is submitted to the provincial legislature of British Columbia.

Saskatchewan Hospital Group Meets in Moose Jaw

The annual convention of the Saskatchewan Hospital Association was held in Moose Jaw, October 22 and 23 under the presidency of Joseph Needham, Unity.

A review of the operation of Saskatchewan hospitals for the year and a report of their progress was made by the deputy minister of public health. Among the important subjects discussed during the convention were: "The Possible Effects of a Health Insurance Plan Upon Hospitals" by Leonard Shaw, Saskatoon City Hospital; "Ladies' Auxiliary Work"; "Raising the Standards of X-Ray Work in Small Hospitals"; "Nursing Standards," with particular reference to shorter hours for nurses, discussed by A. Lawrie, superintendent of nurses, Regina General Hospital; a report on the examination of hospital staffs by Dr. R. G. Ferguson, director of sanatoriums for Saskatchewan; recent legislative amendments, reviewed by the association's solicitor, S. R. Curtin.

A resolution supporting the Canadian Hospital Council was passed following a report of the council work by Leonard Shaw. It was proposed to inaugurate a uniform method of recording statistics and accountancy throughout the Dominion, and the convention went on record as supporting this move unanimously.

The association will hold its next meeting in Saskatoon in 1936 under the presidency of Dr. R. G. Ferguson.

Mental Hospital for Children Planned in Massachusetts

A $200,000 children's psychiatric hospital is to be built at the Metropolitan State Hospital, Waltham, Mass., according to Dr. Winfred Overholser, state commissioner of mental diseases, who states that present accommodations for children in state hospitals are inadequate. Only about ninety cases are now being hospitalized in state institutions.

The new institution will house seventy additional children under the age of fourteen. It is to be equipped with playrooms, a gymnasium, a swimming pool and classrooms. Forty-five per cent of the cost of the structure, on which work is to be started in December is to be assumed by the United States Government.

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So, in modeling the forms for WILCO, the new brown latex glove, the Wilson patented curved finger feature was added to other improvements in shape which make WILCO the most comfortable surgeon's glove ever produced.

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With Firmhold Finish for safety and Curved Fingers for Comfort, WILCO will be the first choice of surgeons who prefer brown gloves. Its longer life of usefulness will make WILCO a real economy for the hospital.

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NAMES IN THE NEWS • • •

E. C. POHLMAN has been appointed superintendent of the Decatur and Macon County Hospital, Decatur, Ill., succeeding HOWARD HODGE who resigned recently. Mr. Pohlman has been assistant administrator of the University of Iowa Hospitals, Iowa City, Iowa, and has served as secretary of the Iowa Hospital Association for several years.

DR. T. EBEN REEKS for the past fifteen years superintendent of the New Britain Hospital, New Britain, Conn., died in Boston. For two years beginning in 1914, Doctor Reeks was superintendent of health in New Britain and from 1917 to 1920 he was deputy state commissioner of health and director of the state bureau of preventable diseases in Connecticut.

M. HASKINS COLEMAN, superintendent, Johnston-Willis Hospital, Richmond, Va., has resigned from that position to become director of the Richmond Hospital Service Association, a group hospitalization plan.

ELLA MOFFATT, assistant superintendent of the General Hospital, Chatham, Ont., has been appointed superintendent of the Galt General Hospital, Galt, Ont.

DR. CLARENCE H. WESTGATE has been appointed medical director of Lenawee County Tuberculosis Sanatorium, Adrian, Mich., where he succeeds DR. WELLINGTON B. HUNTLEY, now chief of the medical staff at the Southern Michigan Prison, Jackson.

DR. ROBERT E. GARRETT, superintendent of Spring Grove State Hospital, Catonsville, Baltimore, Md., resigned, November 1, because of ill health.

DR. JOHN F. ERDMANN was honored by the New York Post-Graduate Medical School and Hospital, New York City, when the new auditorium, a gift from the board of directors, the faculty association and the professional staff of the hospital was named Erdmann Auditorium. A bust of Doctor Erdmann, a gift of the faculty association, was installed in the auditorium.

DR. DUDLEY T. DAWSON, superintendent of the Peoria State Hospital, Peoria, Ill., resigned from that position on October 31.

MADGE PORTER, formerly superintendent at Wahpeton Hospital, Wahpeton, N. D., has been appointed head of the newly completed municipal hospital at Ripon, Wis.

MARION ZILLEY, director of nursing education at the State of Wisconsin General Hospital, Madison, has been appointed superintendent of nurses at Touro Infirmary, New Orleans.

DR. ROY L. LEAK, superintendent of Connecticut State Hospital, Middletown, Conn., and of the Fairfield State Hospital, Newtown, resigned recently from the Newtown institution. DR. CLIFFORD D. MOORE, chief executive officer of the Boston Psychopathic Hospital, Boston, has been appointed Doctor Leak's successor.

DR. KARL M. BOWMAN, chief medical officer of the Boston Psychopathic Hospital, was selected to head the psychiatric division of Bellevue Hospital, New York City, out of a group of sixteen alienists from all sections of the United States. The civil service commission selected Doctor Bowman upon the recommendation of a group of leading alienists who examined the candidates. The $9,000 a year post has been vacant since the resignation of DR. MENAS S. GREGORY a year and a half ago.

DR. MILBURN W. KEMP, former assistant superintendent of the Fergus Falls State Hospital, Fergus Falls, Minn., has been appointed superintendent of the Anoka State Asylum, Anoka, Minn., where he fills a vacancy left by the death of DR. A. T. CAINE.

EDITH PETTIT WHICHER, superintendent for a number of years of the Reconstruction Hospital, New York City, a unit of the New York Post-Graduate Hospital, New York City, was married to George F. Bourne of Lenox, Mass.

J. LOU BRANDEL, president of the board of trustees of the Memorial Hospital, Owosso, Mich., was appointed superintendent of the institution following the resignation of DR. G. T. SOULE.

DR. CHARLES E. MARTIN has been appointed medical director of the Albany Hospital, Albany, N. Y., where with EVERETT W. JONES, executive director, he is succeeding DR. JOHN G. COPELAND.

WILLIAM H. MONCREIF, colonel, Medical Corps, U. S. Army, has been appointed superintendent of the Army and Navy General Hospital, Hot Springs National Park, Ark.

JESSICA HEAL, superintendent of the school of nursing at Genesee Hospital, Rochester, N. Y., since 1906, resigned on November 1.

DR. EDWARD H. HUME, former director of the New York Post-Graduate Medical School, New York City, has been given the task of coordinating the work of government and mission hospitals in China, to promote friendly cooperation and expand facilities. There are now more than 250 mission hospitals.

DOROTHY ROOD, consultant public health nurse of the division of public health nursing, state department of health, has resigned from that position in order to accept an appointment as associate professor in nursing education at Ohio University.

B. W. STEWART, superintendent, South Side Unit of the Youngstown Hospital Association, Youngstown, Ohio, was elected executive secretary of the Ohio Hospital Association, following the resignation of A. E. HARDGROVE.

NELLIE HOWARD, former superintendent of nurses at Moses Taylor Hospital, Scranton, Pa., and founder of the school of nursing at Burlington County Hospital, Mount Holly, N. J., has been appointed directress of nurses at Buffalo General Hospital, Buffalo, N. Y.

ALICE B. COE, executive assistant at the Massachusetts Eye and Ear Infirmary, Boston, has been appointed superintendent of Milford Hospital, Milford, Mass.

SISTER MARGARET WALSH, superintendent of St. Vincent's Hospital, Bridgeport, Conn., died in that institution at the age of forty-two. Before assuming her post at St. Vincent's, Sister Margaret was superintendent of the Allegheny Hospital at Cumberland, Md.

CAROLYN E. NICHOLSON has been acting superintendent of Geneva General Hospital, Geneva, N. Y., since the resignation of EMMA LIPHARDT.

ELEANOR MCK. SAVAGE has been appointed superintendent of nurses at the Knickerbocker Hospital, New York City. For the past four years Miss Savage has been superintendent of the Cornwall Hospital, Cornwall, N. Y.

JEANETTE B. COTTLE, R. N., has been selected to head the Haldmand Memorial Hospital, Dunnville, Ont. She fills the vacancy left by the resignation of L. M. SHELTON.

DR. PHILIP NARODICK, Seattle, Wash., has been appointed medical director of King County Tuberculosis Hospital in that city.

DR. WILLIAM H. SLAUGHTER, senior surgeon, U. S. Public Health Service, has recently taken charge of the U. S. Marine Hospital, New Orleans, succeeding DR. THOMAS B. H. ANDERSON, who has been transferred to the marine hospital in Baltimore.

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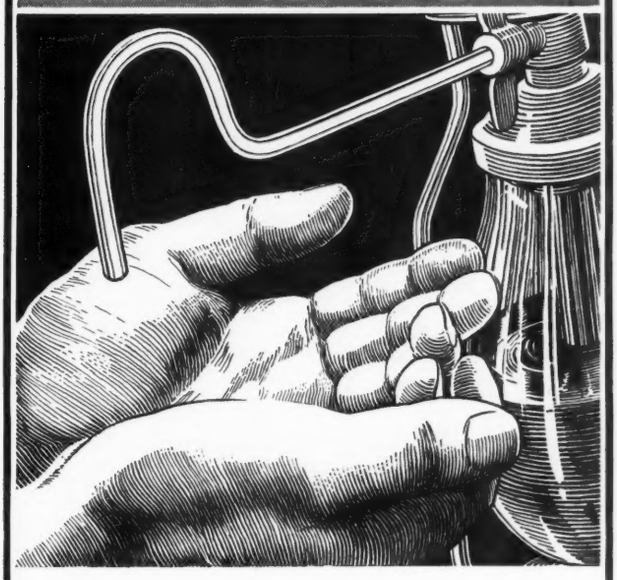

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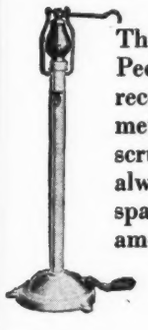

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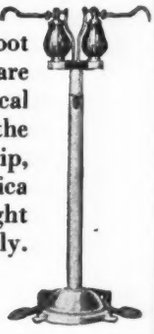

HOSPITAL DEPARTMENT

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ADA HUBBELL, assistant superintendent of nurses at Harper Hospital, Detroit, has been appointed superintendent of Niagara Falls General Hospital, Niagara Falls, Ont.

DR. HANS SPEMANN, professor of zoology at the University of Freiburg im Breisgau, was awarded the Nobel prize in medicine for 1935 in recognition of his research on embryonic evolution.

C. V. THOMPSON is the newly appointed head of Ottawa General Hospital, Ottawa, Ill.

MOTHER COURVILLE, superior of St. Vincent's Hospital, Toledo, Ohio, has been appointed mother provincial of the Sisters of Charity, with headquarters at Holy Ghost Hospital, Cambridge, Mass.

VIOLET TOTTEN was recently made superintendent of Faulkner County Hospital, Conway, Ark.

DR. HUGH H. MITCHELL has been reappointed superintendent of the Regina General Hospital, Regina, Sask., and C. C. GIBSON has been made steward. DR. W. R. COLES, who has been devoting half his time to the office of superintendent since Doctor Mitchell's resignation, has returned to his work in the health department.

ETHEL A. JONES is the new superintendent of St. Luke's Hospital, Fergus Falls, Minn.

DOROTHY RINES has been appointed superintendent of the American Legion Hospital for Crippled Children, St. Petersburg, Fla., succeeding MRS. MAUD BURKHART.

WILLA STRUTHER, acting superintendent of Berwick Hospital, Berwick, Pa., is now superintendent.

MARGUERITE BROWN has been appointed superintendent of Sigma Gamma Convalescent Home, Mount Clemens, Mich.

EDWARD JONES has resigned from the Hospital Service Association at New Orleans to organize a group hospitalization plan in Baton Rouge, La., under the auspices of the Baton Rouge General Hospital.

DR. HAVEN EMERSON was awarded the William Thompson Sedgwick medal for distinguished service in public health by the American Public Health Association at its annual meeting in Milwaukee. Doctor Emerson was president of the association in 1933-34, and since 1922 has been professor of public health administration and director of the institute of public health at Columbia University College of Physicians and Surgeons.

MRS. B. J. PHILLIPS is superintendent of Provident Hospital, Baltimore, succeeding the late R. J. CROSS.

JOHN M. SMITH, director of Hahnemann Hospital, Philadelphia, for fifteen years, resigned from that position during November. Mr. Smith is a former president of the Pennsylvania Hospital Association and was twice president of the Philadelphia Hospital Association. According to announcements made by the hospital board, the position of director will now be abolished, and the institution will be directed by a provost and an executive vice president.

DR. SEYMOUR R. LEE, at one time assistant superintendent at Ancker Hospital, St. Paul, for eight years, and more recently superintendent of Willmar State Asylum, Willmar, Minn., has been appointed superintendent at Ancker Hospital, where he succeeds DR. FRED CARTER.

A. E. Hardgrove Takes Office

Arden E. Hardgrove, the new assistant executive secretary of the American Hospital Association, took over the duties of that office in Chicago on November 18. Mr. Hardgrove, the superintendent of Akron City Hospital, Akron, Ohio, until his appointment, was for many years executive secretary of the Ohio Hospital Association, the first state association to be an official branch of the national organization. He was also a member of the legislative committee which succeeded in having passed by the state legislature a bill for the reimbursement of hospitals for the care of indigents who are injured in motor vehicle traffic accidents.

Theater World Donates Hospital to Rogers Fund

The theatrical world, where for many years Will Rogers was a stellar figure, has contributed $1,500,000 to the Will Rogers Memorial Fund. The donation will be devoted to helping handicapped children, always a concern of the famous humorist.

Owen D. Young, chairman of the operations committee of the fund, in announcing the huge gift, said it included a million in property, on which stands a sanitarium, at Saranac, N. Y. This was donated by the National Variety Artists Fund, Inc.

The remaining $500,000 was the cash gift of five major theater circuits: Fox West Coast Theaters; Loew's, Inc.; Paramount Theaters Service Corporation; Radio-Keith-Orpheum Corporation and Warner Brothers Theaters Circuit.

The sanitarium will be known as the Will Rogers Memorial Hospital and will be open to those of the stage and screen with handicapped youngsters.

Admit 25 New Hospitals to United Hospital Fund

The admission of twenty-five additional institutions to the United Hospital Fund of New York brings the total number of hospitals participating in the United Hospital Campaign to eighty-one, it is reported.

The voluntary hospitals just admitted to the fund are: Beth David Hospital, N. Y. C.; William Booth Memorial Home and Hospital, N.Y.C.; Harlem Eye and Ear Hospital, N. Y. C.; Mary Immaculate Hospital, Jamaica; St. Elizabeth's Hospital, N. Y. C.; Tonsil Hospital, N. Y. C.; West Side Hospital and Dispensary, N. Y. C.; Beth-El Hospital, Brooklyn, Bethany Deaconesses' Hospital, Brooklyn; Brooklyn Women's Hospital, Brooklyn; Evangelical Deaconess Hospital, Brooklyn; Hospital of the Holy Family, Brooklyn; Israel Zion Hospital, Brooklyn; St. Catharine's Hospital, Brooklyn; St. Cecelia Hospital for Women, Brooklyn.

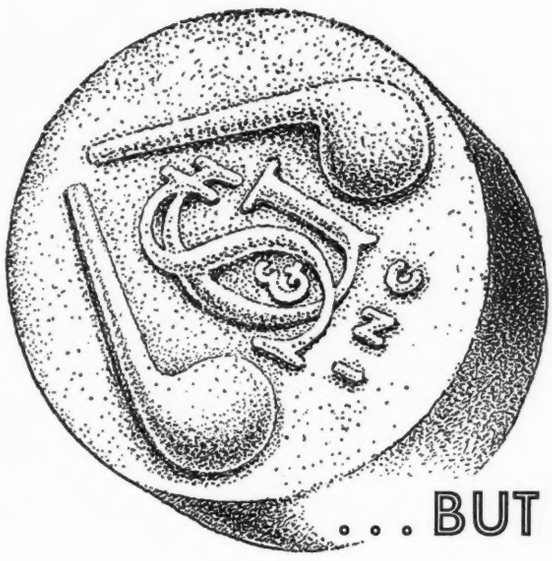
Also St. Charles Hospital for Crippled Children, Brooklyn; Jewish Memorial Hospital, N. Y. C.; Bronx Eye and Ear Infirmary, N. Y. C.; Jamaica Hospital, L. I.; Rockaway Beach Hospital and Dispensary, L. I.; St. Anthony's Hospital, L. I.; St. John's Long Island City Hospital, L. I.; St. Joseph Hospital, L. I.; Richmond Memorial Hospital, S. I.; Staten Island Hospital, S. I.

Hospital Housekeepers Active

Hospital women are playing an important part in the newly formed Hudson Valley chapter of the National Executive Housekeepers Association. Mrs. Althea C. Berry, housekeeper, Albany Hospital, Albany, N. Y., has become a member and Jessie Wilson, housekeeper, Memorial Hospital, Albany, has been made recording secretary and treasurer. On the board of directors are Mrs. Minnie S. Lindsay, Nathan Littauer Hospital, Gloversville, N. Y., and Kathryn F. Tobin, Vassar Brothers Hospital, Poughkeepsie, N. Y. Margaret Waldron, Ellis Hospital, Schenectady, is chairman of the program committee.

Colorado Association Meets

The annual meeting of the Colorado Hospital Association was held in Denver, November 4 and 5, when Walter G. Christie, superintendent, Presbyterian Hospital, Denver, was installed as president for 1936. Dr. Herbert A. Black, Parkview Hospital, Pueblo, is president-elect of the association, and William S. McNary, Colorado General Hospital (Colorado School of Medicine and Hospitals) was reappointed executive secretary.



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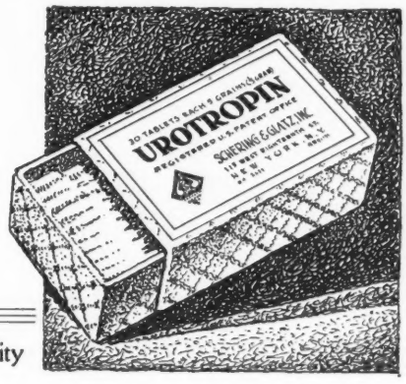


SCHERING & GLATZ, Inc., 113 W. 18th Street, New York City

READER OPINION • • • •

Negro National Hospital Fund

Sirs:

I have just returned from a 4,000 mile trip through six states of the South in the interest of the Negro National Hospital Fund. . . .

I must hasten to advise you that no funds have as yet been raised for the Negro National Hospital Fund. The campaign for funds has not yet been launched. I have for the past two years been laying the foundation for the launching of the nationwide campaign in the near future. Nor have we yet elected a treasurer or president. All this will take place within a few weeks.

As for the question of segregation, anybody who raises that question does so without a knowledge of the condition that prevails throughout this country in connection with Negro patients, physicians and nurses and their status in the public and private hospitals of the United States or he does so insincerely, with an aim to defeat the program of the Negro National Hospital Fund.

My plan has as its purpose a manly attempt of 12,000,000 black Americans, who are social outcasts, economic pariahs and political nonentities, to throw off this status of virtual slavery and redeem ourselves by our own efforts with our own pennies.

I have made a complete survey of every municipal, county and state hospital in forty-two states and . . . found . . . that the Negro physician has absolutely no chance in any of the public hospitals of the United States. In fact, I have found only one public hospital in America, apart from the two Negro tax supported hospitals in Missouri (one at St. Louis and another at Kansas City) in which a Negro physician may practice surgery. That one is the Harlem Hospital in New York City. The Negro physician and nurse . . . are virtual outcasts from the hospital system of America.

What then should we do? Should we sit down and fold our arms and remain outcasts for ever and allow our sick to continue to die like flies for lack of hospital care and allow our trained men and women to go without opportunities for professional, social and cultural leadership?

The only solution of this problem of adequate hospitalization for the Negro race in America and proper training of Negro physicians, nurses and social workers is for the Negro race to take the initiative in founding its own institutions and provide for itself its own development. . . .

I have discussed this plan with the leaders of America, in every walk of life, with governors, mayors, college presidents, deans of medical schools, bankers, big business men, hospital executives, social leaders and publishers. . . . They all agree with me that my plan is the only way out and they have given their written endorsements to it and have allowed their names to be used as backers of the plan.

The truth of the matter is that the white man will not mix with the Negro. He will help him to get his own institutions, but he is not going to share his with him, so the only thing to do is to face the facts as they really are and face them with a simple practical program.

(Rev.) Amos. H. Carnegie,
Executive Secretary.

Negro National Hospital Fund,
New York City.

The plan of the Negro National Hospital fund to raise $150,000 000 for the construction of Negro hospitals is based on the hope that each of the 12,000,000 Negroes in the United States will donate one cent each week to the Fund. (The Modern Hospital, April, 1934.) The aim is given as "a standard hospital for the Negro race in every city of the nation where there are 10,000 or more Negroes."

While all students of social welfare will readily agree that the present provision of medical and hospital care for Negroes is inadequate and that opportunities are lacking for the needed clinical training and the practice of their profession by Negro doctors, dentists and nurses, there is question in the minds of some about two aspects of the program of the fund. First, is it desirable from the standpoint of the patients that separate hospitals be established for Negroes and that these be manned

largely or entirely by Negro physicians and nurses? Second, does the plan proposed by Mr. Carnegie have enough chance of success to merit support and effort by those who wish to help the Negro race?

Since the above letter was written the board of trustees have adopted a constitution, elected officers and officially launched the nationwide campaign for funds. George E. Wibecan is president, Dr. Walter Merrick, vice-president, C. C. Huitt, president of the Dunbar National Bank, treasurer, and Charles H. Woode, recording secretary. Mr. Carnegie is executive secretary.

While The Modern Hospital is entirely sympathetic with efforts to provide better hospitalization for any uncared-for group of citizens, white or colored, it does not wish to endorse the Negro National Hospital Fund until such time as it has been demonstrated that the plan is sound and practical and that the money collected will be scrupulously handled and a public accounting made therefor. The constitution of the fund requires quarterly or semi-annual audits by a certified public accountant and publication of all gifts to the fund in a magazine to be established.—Ed.

Colors for the Operating Room

Sirs:

. . . I would like your suggestions . . . relative to the color scheme we might use in painting our operating wing. . . . The hospital is situated on a desert at an elevation of about 6,000 feet. There are no surrounding buildings to interfere with the light and we have no smoke problem. As you will notice from the attached sketch [of the operating wing,] there are abundant window openings with a skylight in the operating room. We prefer to use natural light in this wing whenever possible.

The floors are white tiling which is carried up a distance of 4 feet on the walls. At present the ceilings and the woodwork are painted a deep ivory and the walls a French grey. This combination has been satisfactory. However, it is possible that there might be other combinations of color or shades which would be even more desirable. . . .

R. A. Bowdle, M.D.,
Chief Surgeon.

Steptoe Valley Hospital,
East Ely, Nev.

This request was referred to Faber Birren, color expert, Chicago, who replied as follows:

Sirs:

I have given careful attention to the letter from Doctor Bowdle. . . . To all indications his surgical division at the present time has a good appearance. However, if changes are desired, the following recommendations might have possibilities.

Hospital authorities have in recent years attempted to reduce eye strain in the operating room. The conventional use of white is largely undesirable and the problem of illumination minor because of localized lighting sources. Surgical work done under an operating light produces severe retinal strain. To rest the surgeon's eyes the environment of the room is best when fairly low in key. Thus in glancing up from his task the surgeon can relax eye tension and then return to the operating field with keener vision. In addition to toned walls there is some advantage in making them a soft blue-green. This color complements the hue of blood, neutralizes after-images, and aids the surgeon in maintaining exact perceptions of tissue.

If Doctor Bowdle does not wish to change the white tiling in the operating room, I suggest at least that the upper wall be painted somewhat like the attached sample [a rather dark bluish green]. It would be best, however, to replace this white tile with blue-green and also to see that all woodwork and trim matches. The ceiling might advisedly remain white for added lighting efficiency and to reduce shadows.

For the other rooms in this department the white tile should be perfectly satisfactory. Instead of grey upper walls, however, I recommend the use of a soft green similar to the second sample attached. Considering the environment of this institution I think this pale green color would offer a pleasant relief from the psychologic effects of heat and desert surroundings. With this green the woodwork would look better painted white rather than ivory.

Faber Birren.

Chicago.

On request to The Modern Hospital, copies of the two samples referred to by Mr. Birren will be furnished to readers as long as the supply lasts.—Ed.

What Is a Hospital Day?

Sirs:

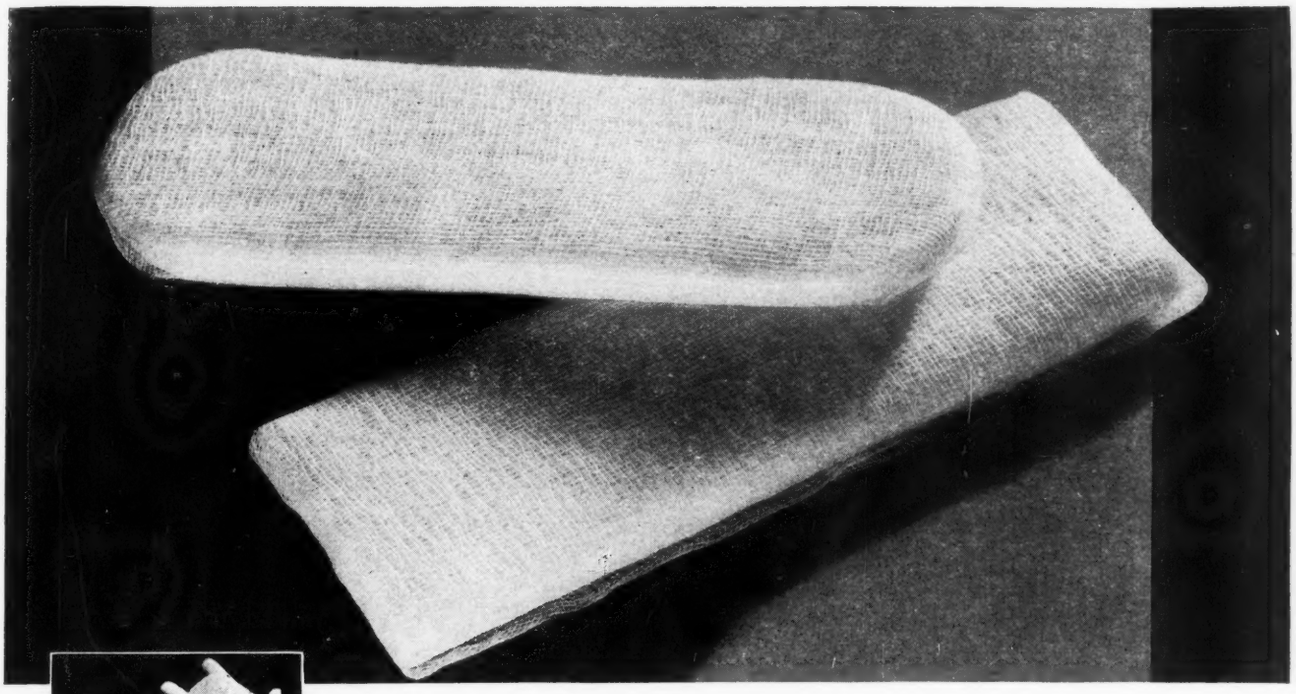
It is our desire to have the statistics prepared by our hospitals in the tropics conform with the standard practice adopted by hospitals in the United States.

Can you inform us whether there is any standardized method for determining the "number of hospital days" for patients, and, if so, refer us to the source of authority? If there is any difference in the method of determining "hospital days" for statistical purposes and the "hospital days" to be charged for on hospital bills, will you kindly give us both bases for figuring? . . .

R. C. Conner, M.D.
General Manager, Medical Department.

United Fruit Company,
New York City.

The A. H. A. manual on "Hospital Accounting and Statistics" defines a patient day as "that period of service rendered a patient between the census taking hours on two consecu-



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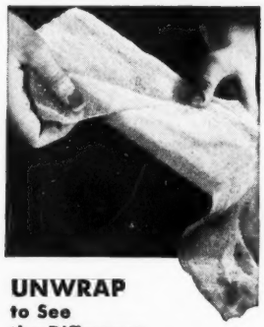

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tive days, the day of discharge being counted only when the patient was admitted that same day." Through a clerical error the formula for calculation of total patient days given in the manual is not correct. An accurate formula has been prepared by C. Rufus Rorem for the forthcoming edition of The HOSPITAL YEARBOOK, which is as follows: Take a midnight census at the end of the day and add the number of patients who were both admitted and discharged (or died) that same day. However, a patient who was both admitted and discharged between one daily census and the next is to be recorded in patient days only if he actually occupies a hospital bed and, in addition, has a hospital chart originated.

This definition of patient day is for statistical purposes only. For the purpose of making charges on patients' bills fractional days are often used and are found to be desirable. The day may be divided into halves, thirds or quarters for this purpose. Thus a patient who arrived at 11:00 p.m. on Thursday and was discharged at 1:00 a.m. on Saturday might be charged with one and one-third days. Yet for statistical purposes his stay would be recorded as two patient days since he was present during two midnight censuses. The discrepancy between the statistical and the accounting figures would be small at the end of a year, as the law of averages would tend to equalize them.—Ed.

Annual or Life Appointments?

Sirs:

One of the problems of the board of trustees in charge of our new hospital is the formation of the staff and the rules and regulations that shall govern same. In an editorial in the September number of The MODERN HOSPITAL, the opening paragraph is:

"The staff should be reappointed annually. Perennial or automatically appointed staffs are not always the most alert or the most scientific. The ever present necessity of working and progressing to retain a hospital appointment is a stimulus to good medical work."

A group of doctors of this community who will work in the hospital are strenuously urging that when a staff member is once appointed he should be considered a member of the medical staff until he withdraws or is dismissed.

The writer presumes that the statement made in the editorial . . . is not simply an opinion of the writer of the editorial but that it has the approval of standard hospital organizations. I would like to be advised as to such standard authorities. . . .

Upon investigation I find that a great number of the hospitals of good standing in such cities as Sioux City, Iowa; Minneapolis, Minn., and other places, large and small, have a requirement for annual election of the members of the medical staff. . . .

Jason E. Payne,
President.
Dakota Hospital Association,
Vermillion, S. D.

The statement is not merely a personal opinion but has the support of extensive experience and many hospital authorities. In his recent book, "Hospital Organization and Management," Dr. Malcolm T. MacEachern states that except for teaching hospitals, "the one year term has many advantages provided appointment is carefully considered and depends on merit. Staff appointment is desired by every physician. . . . The physician who knows that reappointment is subject to competence will see to it that he keeps abreast of the advances in medical science."—Ed.

Typhoid in the World War

Sirs:

In reading the article in the August number of THE MODERN HOSPITAL, beginning on page 81 entitled, "What the Administrator Should Know About Typhoid Fever," I note that the writer thereof states that in the World War the American army consisted of 2,100,000 men, and may I not, without being accused of effrontery, inform you that official records show that there were 4,326,929 commissioned and enlisted men in the World War and that 2,151,644 of them served overseas? If you refer to the current issue of the *American Legion Monthly* you will find that Major General Robert U. Patterson, late surgeon general of the Army, states in his article "The Doctor Follows the Flag" that there were 1,531 typhoid cases in the armed forces during the World War.

HUGH SCOTT, M.D.,
Manager.
Veterans Admin. Facility,
Hines, Ill.

In Tice's Practice of Medicine, vol. 4, page 573, the following statement is made: "From September 1, 1917, to May 2, 1919, there were 1,901 cases of typhoid fever with 213 deaths with an average strength of 2,121,396." The above statement refers to the American army and while 4,000,000 men were mobilized in the United States during this period, the average strength of the army for the period was slightly over 2,000,000 men. These statistics have as their authority Dr. C. G. Jennings and Dr. P. F. Morse, the editors of the section on typhoid fever who state that they were secured from Col. D. C. Howard of the office of the surgeon-general of the U. S. Army.—Ed.

Hospital Honors War Nurses

A sixty-foot flagstaff, made of native pine, was erected on the lawn of the Adrian Hospital, Punxutawney, Pa., in an Armistice Day ceremony, and dedicated to the memory of the war nurses from that community. A gift from the John Jacob Fisher Post of the American Legion and the Robinson-Morrison Post of the Veterans of Foreign Wars, the staff was accepted by the president of the hospital as a perpetual responsibility of the trustees. Louis G. Trimble is superintendent of the hospital.

Hospital Library Book List

A book list for hospital libraries in the form of a mimeographed quarterly is to be issued by the hospital libraries committee of the American Hospital Association, at a subscription price of twenty-five cents a year. The first number, which is scheduled for January 1, will be sent as a sample copy to those who request it.

Ohio Organizes Counties in Group Hospital Plan

A statewide plan for the periodic payment of hospitalization costs based on county units in order to comply with a restriction contained in the General Code of Ohio, stating that such contracts can be sold only in the county in which the hospital is located, has been announced by the committee on hospital economics of the Ohio Hospital Association.

Coordinated by the association, these county units will make it possible to sell every employee of a group a hospital contract regardless of the county in which he lives by giving him the contract of his county.

Twenty-four counties, each having a population of 50,000 or more, have been asked to organize corporations similar to the Cleveland Hospital Service Association which will act as an agency for the promotion of group hospitalization in the various counties. Two committees, each with fifteen members, one composed of laymen, the other of hospital executives, will act in an advisory capacity.

The Ohio Hospital Association, according to the plan, will set up a separate organization in each county for the promotion and operation of the county associations, and the funds for each organization will be held separately. A central fund, established by the hospital association will be used in the promotion of the county plans, and, in turn, the association will be paid for its services by the individual county association at a rate based upon the number of county subscribers.

Women Campaign for Funds

Over 1,000 women, members of the social service groups and auxiliaries of thirty-three hospitals, have enrolled to solicit funds for the emergency needs of these institutions. Mrs. William Woodward is chairman of the women's committee organization for the United Hospital Fund campaign.

Resolution Adopted

The following resolution was adopted by the Hospital Council of New York City on November 6:

In view of the interrelations between municipal or public and private or voluntary hospitals in New York City, the hospital council deems it inadvisable that either public or private hospital authorities commit themselves to any major program of hospital construction, without previously conferring with the hospital council in regard to the need and urgency of the project. In the opinion of the council, no such project should be launched unless it can be shown to be assured of support and wisely located.

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6 Installation by specially selected Acousti-Celotex Contracting Engineers.

There is scarcely a person who will deny the importance of noise control in the efficient administration of a modern hospital. The injurious effects of noise on patient comfort and recovery are too obvious to require explanation.

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Conducted by E. M. Bluestone, M.D.

Moth Damage Prevention

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The great problem, however, is how to get rid of moths that have gained a seemingly uncontrollable headway. The use of good quality gasoline is suggested where a gassing process or heat extermination is not available or practical, or where the services of a professional exterminator cannot be secured. The damage to upholstered furniture is generally caused by an infestation of the interior filling material with moth larvae. These can be exterminated by a thorough application of gasoline.

Mohair can frequently be obtained which has already been treated with a mothproofing agent. However, if it has not been so treated, there are many preparations on the market which may be used to prevent damage by moths. It is desirable to select one which is colorless, odorless and harmless to house pets.

Some mothproofing products after being applied to materials make them inedible to the moth worm. One variety when applied to woolen fabric penetrates the fiber and becomes a part of it. This is usually applied with a sprayer and is excellent for rugs and upholstery, which have first been washed with gasoline.

*The Housekeeper's Battle. Hotel Month. Oct., 1935. Abstracted by Magna Werra.

Good Blankets and Their Care

The results of a survey on buying and caring for blankets, undertaken by the Housekeeping Management Institute* with the cooperation of the National Executive Housekeepers Association, show that there is a distinct trend toward all-wool filling woven on cotton warp for blankets which must withstand strenuous wear. It is said that this type of blanket may be washed to better advantage, is softer and fluffier and has a superior appearance and finish for a given price. It is wise to give specific figures in ordering, such as "from 40 to 85 per cent wool," rather than to specify "part wool."

Finest grades of wool are spongy and resilient, buoyant and lightweight, soft to the touch and clear white or creamy in color. When dyed, the better grades take a beautifully clear tone of color.

Single length blankets are preferable to pairs. Executive housekeepers state that two ample blankets will keep a person warmer than three or four skimpy ones, so that the buying of generously large bedcovers is actually an economy.

The most practical bindings for blankets are sateen, which is inexpensive, washes and wears well; or hemmed or blanket-stitched ends, which are so durable that they usually outwear the blanket. There is a welcome tendency no longer to consider drab and tan as the only colors for blankets and to favor all white, pastels and reversible two-color blankets.

Blankets may, advisably, be stored at the cleaners over the summer. If stored "at home," the storeroom should be cool, dry, clean, well ventilated. The argument as to whether dry cleaning or laundering is best cannot be settled. The institute can only advise housekeepers to decide their own cases by testing local facilities for both methods with a few blankets.

*How to Buy and Care for Blankets. Hotel Management 28: 197 (Sept.), 1935. Abstracted by Elise Davis.

Ice Cream Making in the Small Plant

The University of California has conducted valuable research on the use of fruits in ice cream manufacture.* It was found that fresh apricots, figs, nectarines, pears and cranberries should be cooked before being combined with the mix to avoid icy lumps and a rough texture in the frozen product. Avocados, bananas, grapes, lemons, oranges, persimmons and berries other than cranberries, are used uncooked in frozen products.

Dried fruits other than raisins or prunes are rarely used in ice cream. Apricots may be used, but the fresh or canned fruit is preferred. Dried peaches, pears or figs are not recommended. Some canned fruits, such as peaches and crushed pineapple, require cooking with the sugar in advance as this makes a better texture. Canned apricots, figs, nectarines, pears, prunes, raisins and maraschino cherries do not require additional cooking before being added to the mix. Proportions for the use of all these fruits and berries are given.

There are many flavorings, solutions, mixtures, colorings and candy combinations used in the production of ice cream which may be made up and stored in the refrigerator.

The making of these products in the individual plant preserves strict freshness, makes possible the control of materials and the manner and frequency of preparation, and imparts an improved flavor to the product. Solutions or liquid mixtures of any kind should be stored only in containers of glass, stone crocks or stainless steel and should be kept covered. The formulas for these various flavorings, colorings and mixtures are given.

The formulas for ice creams themselves, with a few exceptions, are standardized for a 40-quart freezer and should therefore be adapted to the size of the freezer in actual use. Suggestions are given for variations in the respective formulas. Each operator may develop additional varieties from the basic mix. Although a 14 per cent butterfat mix is generally used, a higher or lower butterfat mix may be substituted if desired. The composition of the basic mix is 15 per cent sugar, 14 per cent butterfat, 11½ per cent serum solids, .04 per cent gelatine, or a total of 40.04 per cent serum solids.

In freezing, the amount and kind of ice cream to be made should be planned in advance. Vanilla ice cream is frozen first and is followed by plain flavors, fruit flavors and, lastly, coffee, caramel, chocolate and nut flavors.

The time required for freezing and beating will depend upon the temperature, quantity and condition of the mix and the type of freezer. In general, the mix should enter the freezer as near 27°F. to 28°F. as is practical. The mix should be frozen to the consistency of whipped cream, or, it may be standardized by a weighed sample to ensure absolute uniformity at all times. It should be slightly thinner for filling packages than for bulk in order to level off smoothly. Care should be exercised to avoid too great a drop in temperature at the end of the freezing period, which will result in overfreezing of the ice cream.

The best quality of ice cream is commonly obtained at from 80 to 90 per cent overrun. The shipping period should be from three to seven minutes depending upon the size of the batch and the type of freezer. A temperature of from 20°F. to 23°F. is recommended for drawing. The mix should be drawn into chilled containers with the whip beaters running to maintain the flow, and topped with parchment. The containers should be stored in the hardening room or cabinet and should be handled carefully.

For best results, bricks should be

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LITERATURE *in* ABSTRACT • • •

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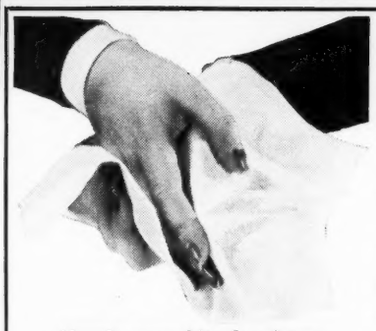

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frozen to from 50 to 70 per cent overrun at a temperature of from 24°F. to 25.5°F. and should be maintained at this temperature during packaging. The packages should not be stored too closely in the hardening chamber.

Fruit, nut, and chocolate ice creams require a longer period of freezing than plain ice creams.

*Handy, Etta H.: Economical Ice Cream Production. Hotel Month. Sept. and Oct., 1935. Abstracted by Magna Werra.

Better Heating at Less Cost

Heating costs can be reduced by so controlling the supply of steam as to balance exactly losses from the building and thus maintain a uniform building temperature throughout the working day.* A reasonable balance must be maintained between body and room temperature. The body ordinarily gives off 500 B.T.U.'s per hour. If more than this is given off, personal discomfort results.

The ideal temperature for the normal healthy person under office conditions lies between 65° and 72°F. Persons with colds or in poor physical condition require more heat. A few electric heaters are a good investment for supplying auxiliary heat, even though electric heat is about twice as expensive as steam.

The average office building in Portland, Ore., is provided with enough radiation to heat it from zero weather to 70°F. with one air change an hour and at two and one-half pounds steam pressure. For the country as a whole, only about 2 per cent of the total heating hours of the year require this much radiation. For 98 per cent of the time there is an excess heating capacity which will overheat the building unless controlled.

There are only two methods of control: (1) intermittently closing off supply by a main valve, zone valves or individual radiator valves, and (2) varying pressure to conform to weather conditions. Greatest economy is realized by a quick warming up period followed by greatly reduced pressure for the rest of the day. Old style single pipe systems do not permit as close control of pressure as newer two-pipe systems because they do not exhaust the air as quickly and tend to air-bind. In the two-pipe system much can be done to correct uneven heating by the use of the orifice, which introduces enough resistance to the flow of steam to ensure all radiators of their proper supply. They do much to eliminate trap troubles.

A vacuum system merely extends the range over which steam pressures may be varied. Pressures below atmospheric are ideal for producing economies. At 5 pounds pressure, one square foot of radiation will give off nearly 11 per cent more heat than it will at 1 pound, and 25 per cent more than at 10 inches of vacuum. The saving in heat increases in proportion as pressures are reduced.

Control by intermittent closing can be done by hand or, better still, automatically. Various systems are available and savings of 10 to 15 per cent are commonly experienced with them. Interruptions should not be too long, however, or air will stratify, cold air going to the bottom and hot to the ceiling. A heated radiator keeps air circulating in a room.

Control by regulation of pressure is available from various companies. These systems work best when a building is zoned with a control valve for each zone. Savings of from 15 to 25 per cent have been recorded with this class of equipment.

Air leakage occurs whenever inside temperatures are higher than outside, but they can be reduced substantially by good weather stripping or packing around windows and doors. More radiation should be provided on the sides that are most commonly exposed to cold winds.

*Leach, A. D.: Better Heating at Less Cost. Bldgs. and Bldg. Management, Sept. 1935, p. 28. Abstracted by Alden B. Mills.

Are Institutional Laundries Profitable?

The total expenses of commercial laundries may be divided into those that would be incurred by any laundry (in a hotel or hospital) and those that would not be incurred by an institutional laundry.* The former is 60.66 per cent and the latter 39.34 per cent. If profit were included, these figures would show an even greater advantage for the institutional laundry.

The actual cost of an institutional laundry will vary with the costs of labor, fuel, electricity, the hardness of the water, and the character of the laundry. The 39 per cent of expenses that a hotel escapes by having its own laundry is made up of collection and delivery costs (21 per cent), sales promotion, administration, rent and building overhead (except maintenance), and similar items. This saving, however, can be made only if the laundry is operated as efficiently as a commercial laundry, if it occupies space that has no rental value, and if administrative expenses will not be increased.

A study of ten large transient hotels averaging 755 rooms each, which do both house and guest work, disclosed an average saving of 27 per cent over commercial rates. A similar comparison for ten small transient hotels averaging 168 rooms each showed a saving of 45 per cent. Each of these comparisons is adjusted to include overhead costs that are not ordinarily in the simple direct costs.

The Roosevelt and Bienville Hotels, New Orleans, reported that their costs with their own laundry were $1,397.92 for November and December, 1934, as compared with $5,442 which would have been charged by the commercial laundry used before the hotels installed their own laundry equipment. Their costs included salaries and wages, employees' meals, laundry supplies, cleaning supplies, printing and stationery, steam, electricity, water, gas and miscellaneous but there was no allowance for depreciation on equipment or rental value of the space.

*Romine, Edward C.: Are Hotel Laundries Profitable? Howarth Hotel Accountant. Sept., 1935, p. 5. Abstracted by Alden Mills.

Waterproofing Leaky Walls

When leakage occurs in a building, it is generally believed to have been caused by the porosity or absorption of the masonry units. However, such is not the case.* Cracks and holes, not pores, cause leakage. These cracks and holes may be anywhere in the building, in the roof, around the windows or at the flashings, but generally they occur in the masonry joints.

In all leaking masonry walls are found one or both of the following conditions, namely, unfilled joints and shrinkage cracks. Dampness is not as serious a problem as penetrating water, since a reasonable amount of dampness prolongs the life of masonry and most building materials.

The ideal wall is a porous wall, one that gives off moisture as readily as it takes it up. A wall that has been covered with a "waterproof" mixture has lost its power of even absorption but still has cracks. The entrance of water is therefore localized and during the winter months when there is a sudden drop in temperature these localized spots contain an excessive amount of water which freezes and breaks down the surface of the material. The alternate freezing and thawing opens up the surface of the wall, hastening disintegration. Furthermore a porous wall diffuses the water that may get in, while a dense wall localizes it and therefore makes it more likely to reach the inside of the building, causing wet spots and damaged areas.

Buildings leak, not because they are like sponges, but because they are like sieves. Transparent coatings will waterproof pores but not cracks and holes.

The remedy for a leaking wall is proper pointing of the masonry. There is as much or more difference in pointing as there is between good and poor dentistry. The principles governing each are similar. Repointing should be done with a suitable mortar and in such a manner that the mortar adheres at all points of the unit, leaving no cracks or holes.

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Aside from the logical reasons for using Palmolive Soap in hospitals, there is a very real aesthetic one, too. It is the sheer pleasure of using this fine, hard-milled, freshly fragrant cake . . . the joy of feeling it burst into rich, creamy lather without rubbing or coaxing—the feeling of refreshing cleanliness it leaves behind it. And you know how much bearing little things like that can have in speeding patient recovery!

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In drafting specifications for waterproofing of structures above grade, one of the most important clauses should be: "No waxes, pastes, grouts or transparent surface coatings may be used in the execution of this work." If a concern is not capable of making masonry water-tight without the use of such materials, it is not qualified to do this work.

*Newman, Rockwell: This Waterproofing Problem. Bldgs. and Bldg. Management. Sept., 1935, p. 36. Abstracted by A. B. M.

Pitfalls That Beset the Tuberculous Patient

The author*, still seeking restoration to health, has drawn upon his experiences during two years of life in a sanatorium for the care of tuberculous patients to outline the many pitfalls that this insidious disease has for the unwary. He vividly reviews the events that precipitated him from his world of activity and accomplishment into a sanatorium, an institution that "discourages mental activity and serious study," and "sets no time for the completion of its course, but holds in general that the most conscientious loafer shall make the swiftest progress toward graduation." The story he tells may be related by many thousands who in the youth of their lives fell prey to the tubercle bacillus.

The author is clear in his description of the symptoms of tuberculosis, and his understanding of the various forms of therapy — pneumothorax, phrenicectomy, oleothorax, pneumolysis, intercostal neurectomy and extrapleural thoracoplasty—as the modern methods to arrest or cure tuberculosis. Without severe criticism, he mildly deplores the prevailing lack of expert knowledge among general practitioners about tuberculosis and its diagnostic significance and cannot understand "why the scientist who considered him 'suspicious' neglected to verify or disprove his suspicion by means of a tuberculin test, a sputum analysis and the use of the x-ray." He urges the proper training of the rank and file of general practitioners to enable them to make the diagnosis of tuberculosis in an early and minimal stage.

He also points out that many patients are compelled to "cure" at home because hospital or sanatorium beds are not available for all active cases. There are only 90,000 beds available for 700,000 active cases, and there are 70,000 empty beds in hospitals which refuse to admit these patients. These factors must be adjusted if we are to progress against tuberculosis and make available modern therapy to all who may require it.

*Hilder, John Chapman: Stop! Rest! Good Housekeeping, Sept. 1935. Abstracted by Morris Hinenburg, M.D.

Spreading the Gospel of Research

The author* of this editorial is a surgeon of mature years who has grown wise in the practice of his specialty. His views should be kept before the governing authorities of hospitals so as to keep the flame of knowledge burning.

He begins by saying that the past tweny-five years have witnessed an almost incredible increase in hospitals throughout the United States. The stage of construction, equipment and organization of these hospitals is over and consideration of the service the hospital owes the community is now in order. There is much educational work still to be done about the idea of research in hospitals, particularly among boards of trustees of such institutions.

The routine function of the hospital is self-evident. However, irrespective of the smallness of the hospital, it does not function to full efficiency unless it contributes a reasonable measure to progress in the art or science of medicine. The obligation of furnishing the world with the results of intensive studies of disease rests on all hospitals. The author condemns the tendency to make a fetish of academic medical research. Instruments of precision are not in themselves open sesames to progress in medicine, nor are they necessarily evidences of hospital efficiency. Research signifies "diligently studious inquiry." The author quotes Carlyle's definition "seeing eye that discloses the inner harmony of things."

Both physicians and patients in hospitals are constantly harassed by organisms too small to be seen, aberrations of function too intricate to be understood, mad cells that overrule the laws in normal growth, all of them challenging—"Find me, catch me, undo me!" They can be found, caught and undone, says the author, only through the one agency of research. This being the case the full dignity of the very name hospital is compromised in the absence of research.

The author mentions the two kinds of research, the so-called laboratory or academic research and the type of research known as clinical investigation. In the second case the patient himself is, to a large extent, the laboratory and the five senses of the physician serve as the major part of the necessary equipment. By this simple combination Semmelweis was able to demonstrate that the washing of hands is a life-saving procedure.

Hospitals do not come under the Miltonic legend of "They also serve who only stand and wait." There are, says the author, many young men who have never been made to feel that as a *quid pro quo* for what opportunities the hospital offers them, they bear the obligation to make their institutions centers of intellectual ferment. It logically follows that promotion in hospital visiting staffs should be dependent not only upon the intelligent or solicitous care of the sick, but also upon the promulgation of studies of disease processes. Living up to the very letter of the ritual of practice is not enough, says Doctor Seelig. There must be evidence of intellectual curiosity leading to an extension and spread of knowledge, thus adding to ritual the indispensable leaven of high adventure.

*Seelig, M. G.: Research in the Hospital, Am. J. Surg. Nov. 1935. Abstracted by E. M. Bluestone, M.D.

Avoiding Fuel Waste

Unburned fuel, commonly known as carbon, which issues from the smoke stack in the form of black smoke, is deposited on the heating surface of boiler tubes.* As a result the heat transfer to the water is decidedly reduced, causing stack temperature increase and incurring waste of heat to the atmosphere. Tests of losses sustained by nontransferred heat to the water in the boiler and wasted to the atmosphere, show up as follows: ⅛ inch thickness of soot, heat loss 3%; ¼ inch thickness of soot, heat loss 5%, and so on up the scale.

There are soot blowers on the market engaging steam or air which free the tubes and heating surfaces of soot and fly ash. A clean boiler will allow the gases to move more freely over the heating surface, but a dirty one will retard the action of the gases and slow up the flow of air over and through the fuel bed, thereby interfering with proper combustion.

One does not have to be a heating expert to figure heat losses when we take into consideration the thickness of metal tubes of No. 10 or No. 12 gauge and add to that a ¼ inch of soot thickness. When this condition exists, we can readily understand the delay in the transfer of heat to the water in the boiler, in the penetration of heat through metal and deposits. The metal thickness must of necessity be there, but the important point is to be sure the other detrimental force is conspicuous by its absence.

The insulating effects of boiler and tube deposits decrease the heat absorption by the boilers from 2 to 7 per cent of the heat expectancy of the fuel, depending upon the thickness of the deposits. When becoming "heat loss conscious," the plant engineer and layman should bear in mind the waste of fuel that may result from incomplete combustion due to insufficient or faulty drafts and the retardation of air flow caused by the deposits.

*Nicholls, P. and Augustine: Effects of Soot on Boiler Heat Transmission, Power Plant Engineering, Nov., 1935. Abstracted by William J. Overton.

A SNOW-STORM CAN STOP AN OPERATION

IN spite of the extreme precautions taken by utility companies, interruptions in the normal electric current supply do occur. Storms, fires, street accidents, and blown fuses within a hospital building itself are beyond their control, or yours.

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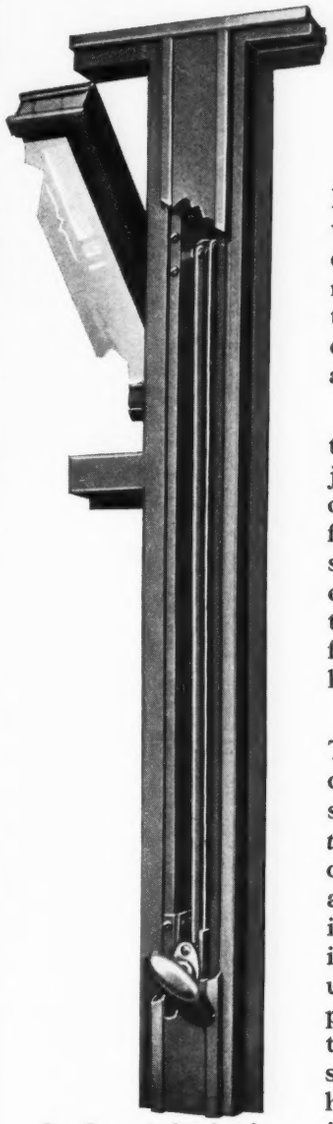

See Sweet's for further reference.

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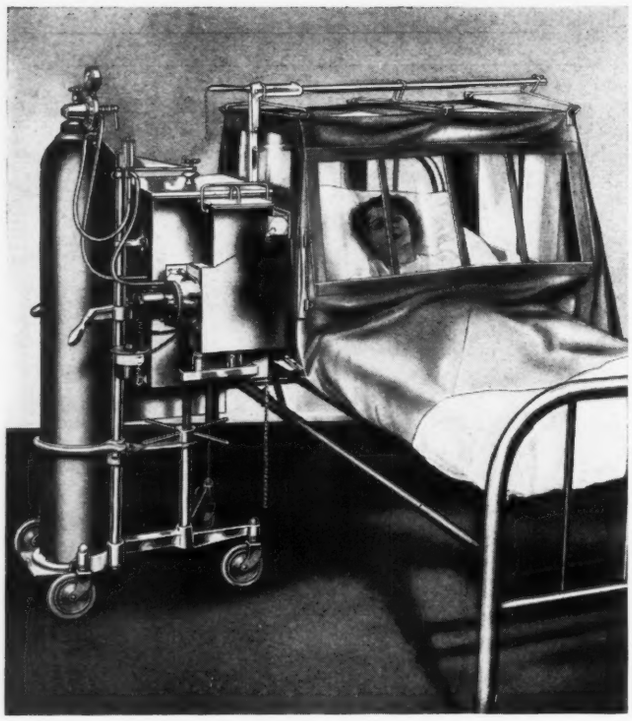

OXYGEN TENTS
by HEIDBRINK
3 MODELS PRICED FROM $205.00

Photo of De Luxe Model 32, above

● Two Motorized Outfits and one Motorless Outfit constitute the Heidbrink Oxygen Tent line for the 1935-1936 season.

All Outfits provide adequate circulation, cooling, humidity control, carbon dioxide control, and an accurate oxygen supply,—all with maximum safety.

Large, "light," spring suspended, collapsible hoods with windows on all sides, entrance sleeves, and sampling outlet,—directly connected to the ice chamber to conserve the ice supply characterize all Outfits.

Operation of all models is practically silent.

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IN MAKING INQUIRY PLEASE STATE IF INTERESTED IN MOTORIZED OR MOTORLESS OUTFITS

The HEIDBRINK CO.

MINNEAPOLIS, MINN., U. S. A.

BOOKS ON REVIEW

ECONOMIC PROBLEMS OF MEDICINE. *By A. C. Christie, M.D. New York City: The MacMillan Company,* 1935. *Pp.* 238, *plus* vii. $2.

This book has been written from the point of view of the private practitioner of medicine. Primary emphasis is placed upon the economic problems of the independent practitioner and his relations to other medical agencies and the public.

Throughout the volume Doctor Christie emphasizes the importance of quality in medical services and his confidence in the intention and ability of the private physician to maintain high standards. He does not believe that social scientists are sufficiently concerned with this problem.

After a description of the situation with regard to medical practice in the United States, Doctor Christie summarizes a group of solutions to existing problems of medical care. He considers group medical practice as of doubtful value and limited application, but argues for the training and utilization of the general practitioner in preventive medicine. He would eliminate waste through the avoidance of patent medicines and better adaptation of hospital facilities to present needs.

He believes that much could be accomplished by improved workmen's compensation laws and the removal of health hazards in industry. Taxation should be used more widely in the payment of private physicians for the care of the indigent. County society plans should be promoted for patients at the subsistence level to pay small fees to independent practitioners, and installment payment of medical bills should be organized more efficiently. The principle of insurance is practicable in Doctor Christie's opinion for the payment of hospital bills and to cover illnesses which are of long duration or of high cost. The volume contains little discussion of the problems of administrative practice or community relations of hospitals.—C. RUFUS OREM.

AIR CONDITIONING FOR COMFORT. *By Samuel R. Lewis. Chicago: Keeney Publishing Co.,* 1935. *Second Edition. Pp.* 278. $2.50.

Mr. Lewis has given a thorough and lucid, although highly technical, exposition of his subject, as a guide to those interested in any type of air conditioning installation. His more general chapters will be intelligible to the layman who wishes to be informed on a matter so much before the public, while those of a more scientific nature should be of practical use to the engineering profession.

The initial chapter is devoted to definitions of terms. A great many people think of air conditioning as a cool room on a hot day. This is only a small part of the story. Mr. Lewis deals equally with a warm room on a cool day, and with such matters as humidifying, dehumidifying, air distribution, heat insulation. The book is replete with charts and tables, summarizing a prodigious amount of research. The tables of heat transmitting properties of walls cover over a hundred different variations of exterior and interior wall construction. The chapter on operating costs, the vital factor for the hospital, is deserving of serious study.

Mr. Lewis furnishes us with a sound, authoritative handbook. The average hospital administrator after glancing through it will recognize the need of consulting a qualified engineer.—CHARLES F. NEERGAARD.

Cash's WOVEN NAMES

For

ECONOMY *and* SANITATION

"A place for everything and everything in its place" is a hospital necessity—towels, sheets and all linen should be marked for each ward or department with CASH'S WOVEN NAMES. Uniforms and all wearables of nurses, orderlies, doctors should be identified individually. Lost laundry, mislaid linen, wrongly used towels mean losses in money, in time, in sanitation, in good management.

CASH'S NAMES will stop these wastes, cut replacement costs, identify instantly. They are the sanitary, permanent method of marking. Quickly attached with thread or CASH'S NO-SO CEMENT (25c a tube).

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Are Nurses Nameless?

MISS MARTIN

—Does the patient or the doctor have to say just "Nurse" or can he address her by name? Cash's Names in a larger size, woven on half inch tape like the illustration are now being attached to the sleeves or caps of uniforms in many hospitals. One dozen —$1.00. Larger quantities at regular name prices.

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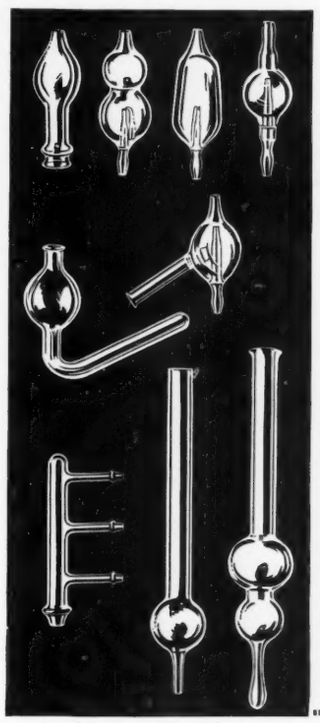

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The best product at attractive prices, backed by a responsible firm!

Ohio now has its own glass blowing department, conducted under the same rigid supervision which has characterized Ohio's production of anesthetic gases for half a century.

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Pyrex nursing bottles are scientifically designed. Smoothly rounded inside for easy cleaning and sterilizing, six-sided outside so that they may be held firmly. Will not roll or topple over. Wide and narrow mouth in both 8 ounce and 4 ounce sizes.

PYREX
BRAND
NURSING BOTTLES

Distributed by Owens-Illinois Glass Company

NOTES *for* BUYERS • •

Safety First With This Suction and Ether Unit

Sponsored by Burrows, the new Superior suction and ether unit is a composite of four important safety features: fire and explosion hazards are said to be eliminated—one can even pour ether on the special sparkproof motor as it is running and fire or explosion does not occur; the chrome-plated metal ether container banishes danger from static electricity; overconcentration of ether vapors is avoided because there is a one dial control of ether vapor, and no heat unit or water jacket around the ether container, and the double suction bottles with automatic shut-off devices make it impossible for contents to be drawn into the motor and damage it. Simplicity of mechanism and economy as to price are final features. Chicago is the locale of The Burrows Company (325 West Huron Street).

The Lamb Also Rises

Dismayed dietitians grieve over those soaring meat prices. But John E. Smith's Sons Company offers solace in a new meat chopper. One utilizes such a machine the better to make that leg of lamb stretch. The new chopper, compact, precise and powerful, is gracefully but not radically streamlined, it is reported. This Buffalo company also submits a new catalogue featuring its kitchen machines which, with their attachments, meet divers cutting, slicing and food mixing needs.

Liver and Yeast Palatably Combined

Armour and Company announce a new liver and yeast concentrate, result of the union of liver extract with hydrolyzed brewer's yeast. A small leaflet is packed with significant facts: Before hydrolysis, the yeast is washed free from gastro-intestinal irritating substances. The hydrolyzing and stabilizing processes are conducted so that the liver odor and taste are eliminated while the anti-anemic properties, as well as the vitamin B complex of both liver and yeast, are preserved.

The product, therefore, contains all the known hematopoietic and vitamin activities of both liver and yeast. When given by mouth, this concentrate is rapidly absorbed, one is advised, and an almost immediate general stimulating effect is noticed. It is not marketed with iron. Where such therapy is indicated, the form of iron suitable for each individual case should be prescribed, in addition to the liver and yeast treatment.

Armour's Pharmaceutical Department may be addressed at the Union Stock Yards, Chicago.

Accessories to the MacEachern Bed

Last month we introduced you to the MacEachern obstetrical bed. Continuing the story as a two-part serial, we report something different in stirrups for obstetrical beds (also developed by Hospital Appliances, Pittsfield, Mass.). With the Comper Knee and Foot Rests every conceivable position can be accommodated, one learns, and this is possible without unstrapping the patient's knees or feet. The locking handles assure permanent fixation in whatever position they are placed and are easily and rapidly adjusted. The knee rests are so designed that

YOU CAN MAKE F-R X-RAY DEVELOPER AND FIXER

No mixing of powders—no heating of water—no fuss. Just pour F-R liquid into tank, add cold water, stir, and in less than a minute your developer or fixer is ready. F-R gives a pure, non-caustic, odorless developer that will produce films of great brilliancy and fine definition, IN STANDARD DEVELOPING TIME. F-R fixer is as efficient as the developer, fixing films cleanly and quickly.

F-R X-Ray Developer and Fixer are stable in both concentrated and dilute form. The developer does not oxidize readily and dilute solutions are crystal clear.

Save time and trouble by using F-R Developer and Fixer.

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SAVE MONEY ON YOUR CASTER PURCHASES!

J & J *Announces* A New Line of ECONOMICAL CASTERS!

Again, Hospital Executives profit by another Jarvis & Jarvis engineering achievement. One Caster base—twelve Utility applicators—that's the money saving production idea that gives you unapproached Jarvis & Jarvis quality at economical prices. Investigate this new series of Casters today!

No. 2171-PON. Many types of furniture are given free rolling action by means of this caster, with its square plate which gives it a wide range of practical uses.

No. 2228-PON. Especially designed for equipment heavily stressed, this caster has a pressed steel applicator which provides two-way (bottom and side) support. Used widely for linen hampers.

No. 2239-PON. An adaptation of the famous J&J Super Caster. Expanding rubber applicator completely overcomes the dropping-out bother. A 500-lb. direct pull will not move it.

No. 2247-PON. This caster has a great variety of applications, such as over-bed tables, and hospital screens. It is designed for metal equipment. It never fails to give complete satisfaction.

No. 2233-PON. This J & J Caster is used widely for tables and hospital furniture. Its live rubber cushion eliminates vibration and guarantees noiseless operation.

No. 2232-PON. Especially adapted for hospital furniture and therapy lamps. It has a brass spring retaining ring and is designed for metal furniture.

Test these Casters *on your own beds!* See for yourself how really fine they are. Simply specify the size and type of Caster you want, and a set will be sent immediately—no obligation on your part.

JARVIS & JARVIS, Inc.

Manufacturers of Superior Hospital Casters and Trucks
Palmer, Massachusetts
SALES REPRESENTATIVES IN ALL PRINCIPAL CITIES

Cut your 1936 thermometer budget

GOOD news! You can figure a definite reduction in thermometer costs for 1936 without in the least lowering the quality of your thermometers. In fact, you can provide your nurses and staff with as good thermometers as any one can buy, and still effect a *substantial* saving in costs.

No miracle about this. Just a simple fact. One Tempglass Thermometer outlasts two ordinary thermometers, costs much less. So Tempglass Thermometers, fine, dependable, scientific instruments, bring the meticulous accuracy of the laboratory into everyday, bedside service—yet, actually reduce thermometer costs even where hospitals are using so-called "cheap" thermometers.

The authorized Faichney Distributor in your territory can give you prompt service.

TEMPGLASS PRICES

	Per Doz.	*Per Gross*
No. 1 Standard Cylinder Bulb	$6.50	$72.00
No. 2 Snub Nose Bulb	6.50	72.00
No. 3 Pear Bulb Rectal	6.50	72.00

Tempglass Twin Set, including two Tempglass Thermometers and carrying case, packed in neat box, $2.50.

FAICHNEY INSTRUMENT CORPORATION
Watertown, N. Y.

TEMPGLASS THERMOMETERS

they reduce to a minimum that cutting pressure on legs of the patient. Since the foot rests are of swivelled type free motion is provided in any direction, with the foot firmly held. As this foot rest is an integral part of the stirrup itself, changing positions during delivery does not require unstrapping of either knees or feet.

The Candid Camera Talks

Of course doctors and nurses are busy—but not too busy to be human. They will like to record on film the activity and voices of merrymakers at the Christmas party. The new RCA Sound Camera (16mm) produced for home talkies is also applicable, we hear, to hospital use. RCA announces from Camden, N. J., that even the novice can produce excellent talkies with this simply operated, compact, light in weight sound camera. And it's said to be entirely free of "gadgets" and wires that might be cumbersome.

More Shower With Less Water

Crane Co., Chicago, say that a shower from their new spray head has a soothing effect on the bather. This, because an aerator causes air to be drawn into the shower stream. But we think part of the "soothing effect" is due to the bather's telling himself that this fine shower bath is costing him less in dollars and cents. It uses less water and it's economically priced.

Instead of the common round spray, which wastes water because only part of it strikes the bather, the new "Economy" shower head is said to give more shower with less water because it is made with an elliptical outlet which directs all the water at the bather. This uniform distribution not only means a saving—it also gives you all the water you want just where you want it.

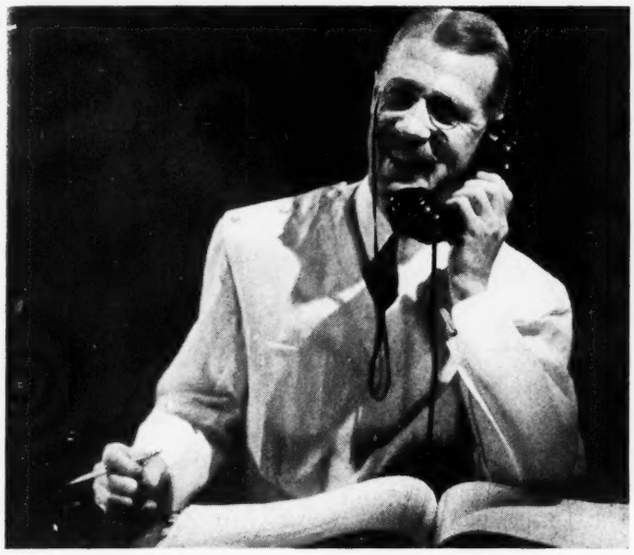
The spray head is easily adjustable to any position and will not corrode if left in one position. It's made of solid brass and is heavily chromium plated. It has a removable brass spreader which causes a swirling action and breaks up the stream of water. There are no tiny perforations to fill up, one learns, no places for scale to collect, and the large holes in the spreader resist clogging.

Automobile to Ambulance—in a Minute

A hospital's general utility car plays a new rôle: astonished, it finds itself functioning as an ambulance! As it is pictured in a new "Arntzen-Way" folder, one observes a stretcher bearing an injured patient who is being placed in an ordinary automobile—put in through the rear of the car.

After being equipped the Arntzen-Way, it takes but a few seconds, we are told, to convert a passenger car (of the type that has a built-in trunk or package compartment, with the rear seat cut in two and working on hinges, and otherwise easily adapted by a mechanic) into this emergency ambulance. With auxiliary and emergency stretcher and first aid kit, it has capacity of two patients and two attendants.

And so, one learns, the country doctor can transport his patient with a minimum of discomfort, or the hospital may have a car which, when it is not an ambulance, may be used for other purposes. (By the way, an automobile salesman dropped in the other day with the information that one of "his" recent models of passenger cars is built to function as just such a dual purpose car).



There's no mystery about Air Conditioning

JUST CALL KELVINATOR!

Air conditioning is still new enough to make many hospital executives hesitate about installing it.

But the mystery of air conditioning vanishes after a few minutes' talk with a Kelvinator representative. After that the whole subject is one which can be decided intelligently with all the facts and figures at hand.

Your nearest Kelvinator representative will, at no cost to you, survey your specific needs and give you definite information regarding equipment, the best method of installation, the return on investment, costs and so forth.

And you can depend absolutely upon Kelvinator's recommendations. Back of them is the experience gained through more than twenty-one years of temperature control.

Call your nearest Kelvinator dealer today. Or write Kelvinator Corporation, 14250 Plymouth Rd., Detroit, Michigan. Factories also in London, Ontario, and London, England.

KELVINATOR

Specialists in Controlled Temperatures Since 1914

Air Conditioning
Household Refrigeration
Automatic Heating
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Ice Cream Cabinets
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Commercial Refrigeration
for every need of merchants, manufacturers and institutions

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Dextrose and Saline Solutions

IN

STERISOL AMPOULES

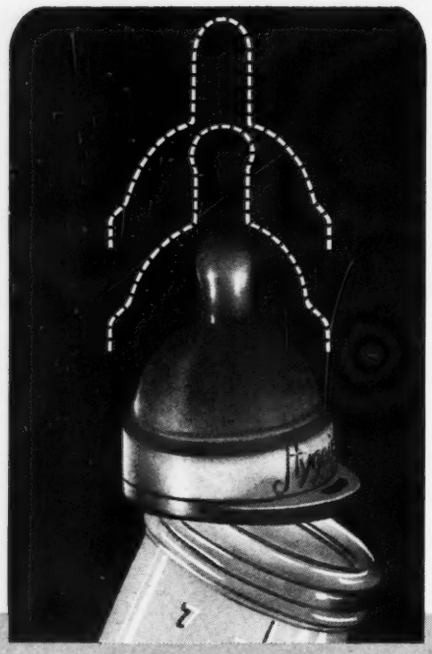
For Intravenous Use And Hypodermoclysis

Convenience with simplicity of administration. Remove tips, attach tubing and administer.

- **Hermetically Sealed.**
- **PYREX brand glass.**
- **Permanent labels.**
- **Three sizes: 250 cc., 500 cc., 1000 cc.**

Literature upon request.

STERISOL AMPOULE CORP.
Long Island City ▲ New York



2 NEW SHAPES TO HELP AVOID WIND SUCKING

""If the baby swallows air while nursing and vomits, a different nipple should be tried."*
Morse, J. L., Wyman, E. T. and Hill, L. W.

TO MEET this need we now offer the three shapes of teats shown above. One of them will conform to the shape of practically every infant's mouth and help reduce windsucking.

SAFEST — BECAUSE EASIEST TO CLEAN. If mothers were never careless, if they always sterilized and thoroughly washed bottles, brushes and funnels, if the same safeguards were always present in every home as in your hospital, almost any bottle or nipple would do.

Unfortunately even the most painstaking mothers may some time neglect some part of the daily routine of preparing the formula. The danger of gastro-enteric infection from this source — *carelessness* — is always present.

You can help eliminate this danger. Start the baby with Hygeia Nursing Bottles and Nipples. They are *safest* because they are easiest to clean.

BOTTLES: 8 oz. size 15c; 4 oz. size 10c: liberal replacement offer on bottles broken *from any cause.*

NIPPLES: Three teat shapes. Three colors—black and red (15c); translucent 20c.

**The Infant and Young Child, Philadelphia, Saunders, 1929.*

HYGEIA

THE SAFE NURSING BOTTLE AND NIPPLE

Paging New Literature!

An Aristocrat Among Catalogs—Recently, in a museum we saw a small and exquisite medicine chest used long ago by the Washington family at Mount Vernon. Well made and sturdy, its every aspect suggested quality—the wooden drawers were nicely carved and stout and the "Essence of Pepper" bottle was carefully placed in its neat little alcove.

We thought of the little medicine chest of Mount Vernon as we read the opening discussion in the new catalog of the American Hospital Supply Corp., Merchandise Mart, Chicago. "Quality is never an accident. It is the result of high intention, sincere effort, intelligent direction and skillful execution. It represents the wise choice of many alternatives, the cumulative experience of many masters of craftsmanship, and it also marks the quest of an ideal after necessity has been satisfied and usefulness achieved. And our greatest responsibility is to strive to make the care of the sick more effective, safer and less expensive."

Many illustrations in the 200 page catalog are in color, the descriptive paragraphs are adequate, and because of its spiral binding, the book lies conveniently flat and open to the page you are studying.

Sneezes Relieved in Eight Minutes—It's the winter season, and one associates chill, snowy blasts with colds and croup. A news sheet from The Swartzbaugh Mfg. Co., Toledo, Ohio, describes the Ideal Electric Inhalator for relief of many respiratory diseases. Let's capture a paragraph: "In eight minutes from the time you turn on the current, the water starts vaporizing and mixing with the medicine. This is amazingly fast, considering the fact that the Inhalator holds enough water for twelve hours' operation." In case you forget, a Watchman Thermostat automatically turns off the electric current when the water boils out of the container.

Strayed, One White Knight—Even as the southern plantation owner used to print and post offers of reward for his runaway slave—so do we advertise the loss of one black (and orange) servant, that 1936 catalogue featuring White Knight and other products for hospitals: "Lost, borrowed or appropriated, one hospital-supplies catalogue! Not that we censure the interested person who borrowed it . . . for it's packed with pictures and paragraphs describing merchandise designed for hospitals. The White Knight uniforms, for instance, demonstrated what's attractive for the nurse of 1936. And about the children's ward we're going to refurbish . . . the White Knight led us to a 'juvenile' drape, one that's all agog with animated building blocks and Mother Goose figures. Before the catalogue vanished, it gave us a glimpse of wound clips removed without discomfort to the patient . . . a neat cabinet for surgical-needle storage . . . a paper blanket for the out-door patient. And what eager nurse wouldn't welcome the watch with the red enameled second hand?"

Reward for the return of the catalogue? A reminder that the White Knight is a kind of town crier bringing news of hospital supplies from Milwaukee (Will Ross, Inc.).

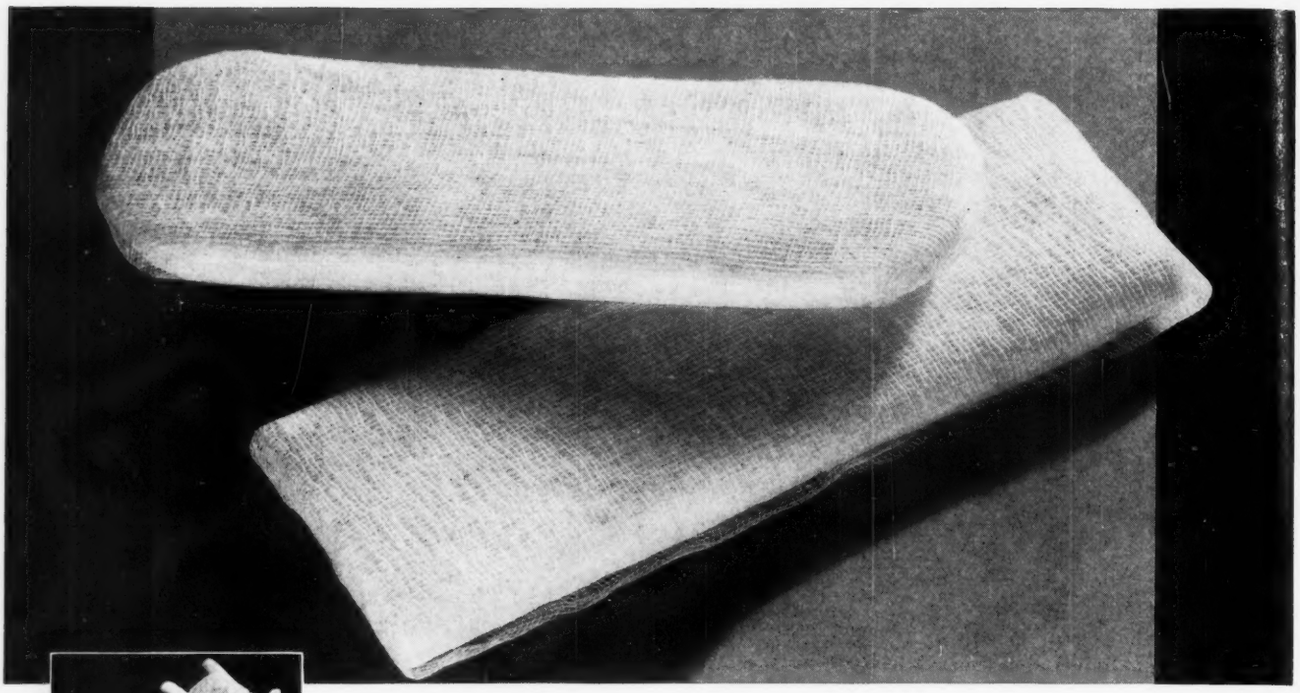
Fifteen Acres for Hospital Ware—It covers fifteen acres, this Terre Haute, Ind., plant in which "Cesco" hospital ware is manufactured. Such ware, according to catalogue No. 35 recently received from the Columbian Enameling & Stamping Company, "is steel shapes on to which has been fused, under intense heat, a form of opaque glass. Thus the surface of the finished piece possesses the cleanliness of glass, yet the ware is as strong as the steel shape beneath." Columbian-Made Hospital Ware, it is stated, has the approval of the American College of Surgeons.

Hospital Library

JUL 2 - 1935

The MODERN HOSPITAL

Volume 45 JULY, 1935 No. 1



Gossamer fine sheets of cellulose — light, white, airy, free from lint.

UNWRAP
to See
the Difference

Inspect the filler, clean, resilient, delightful to the touch.

MAKE THIS TEST

Drop ink on the filler, see how it spreads — a characteristic found only in Kenwood Pads.

YOU will be impressed by the attractiveness of Kenwood Hospital Pads as soon as you open the case. This suggests the care with which these fine pads are made.

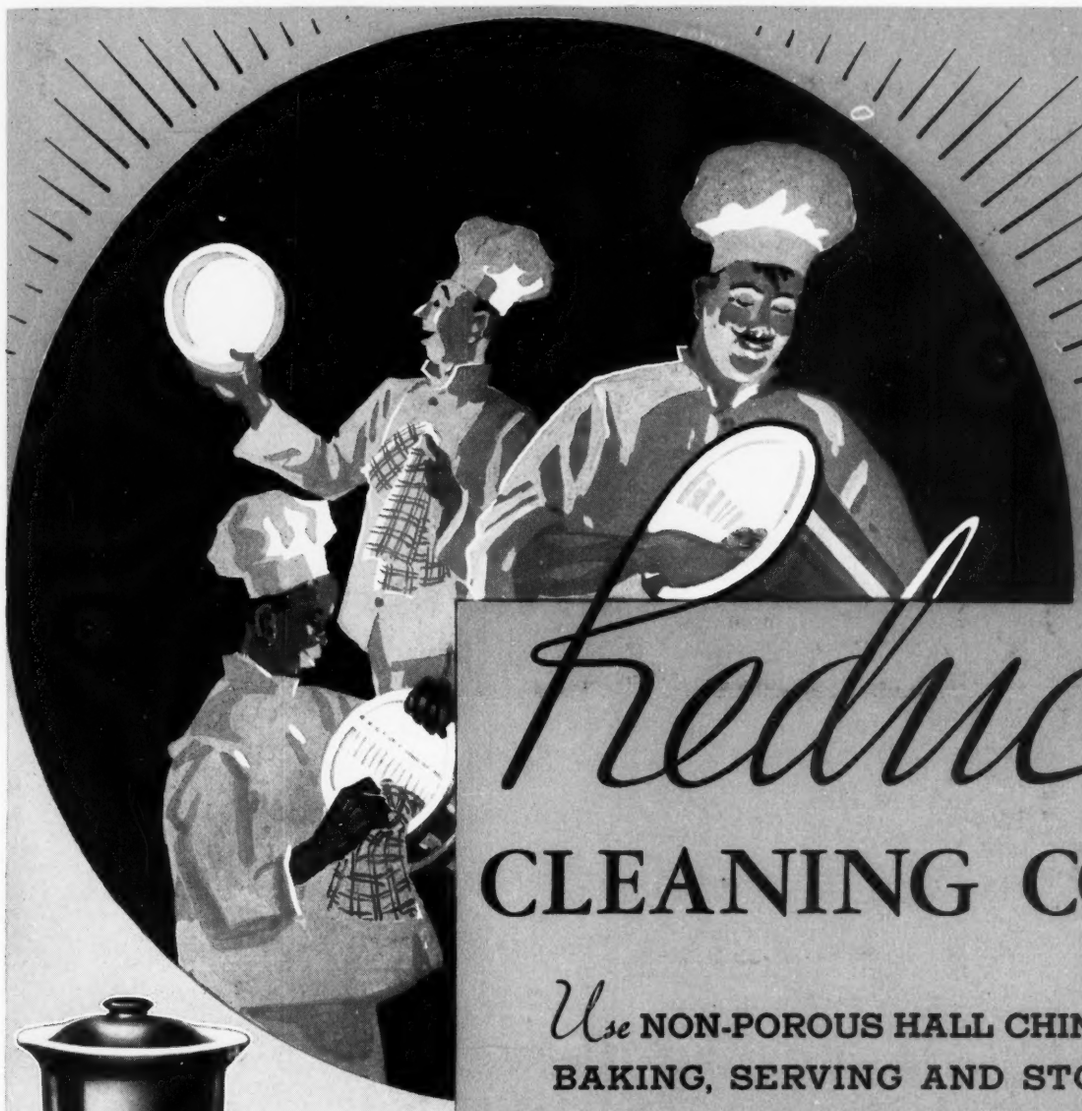
Unwrap the neatly folded gauze and inspect the filler — Sanisorb. A multitude of clean, white, fluffy cellulose sheets. Hold it between thumb and forefinger, feel its soft resilience, its remarkable substance and body. Lay it against your cheek — smooth, delightful to the touch. Now blow through it. Ventilated! And notice the edges—the square end pad entirely open, the round end pad not matted down as are most cellulose fillers. In addition to ventilation, this feature permits full and complete absorption throughout the entire bulk of the pad.

Ventilated—More Absorbent

Let a drop of ink fall on the filler, see how it spreads, racing along the fibers. That is a characteristic peculiar to Sanisorb, found in no other cellulose absorbent — liquids spread out through the fibers, do not soak through in one spot. Now make the final test. Sterilize a pad — with other pads. Compare them. Notice the Kenwood Pad has not warped. Again, remove the gauze. The edges of the Kenwood Pad are still soft, the sheets have not curled. Just as fine, just as good as before it was sterilized! Where is another pad that compares? Yet, in spite of superior quality, Kenwood Hospital Pads cost no more than ordinary pads.

WILL ROSS, INC., Wholesale Hospital Supplies, 779-783 N. Water St., Milwaukee, Wis.

KENWOOD
HOSPITAL PADS



Reduce CLEANING COSTS

Use NON-POROUS HALL CHINA FOR BAKING, SERVING AND STORAGE

Hall China does not fear the dishwashing machine, for although it is the easiest of all ware to clean, it is at the same time, almost impossible to chip or break. ¶Ordinary washing removes all strong flavors and makes the ware bright, shiny, spotless and sparkling. Remnants of food are quickly removed, too, for the smooth, hard glaze offers no footholds on which they can cling. ¶Hall China will not stain, tarnish or scorch, is absolutely non-absorbent and is impervious to food acids or alkali. ¶Dish-washing time is saved, breakage is almost entirely eliminated and your ware always looks refreshingly new—if it is Hall China. Our latest catalog describes the entire line.

HALL FIREPROOF CHINA

Secret Process

HALL CHINA COMPANY · EAST LIVERPOOL, OHIO

SECURITY

LONG STRANDS . . . SOFTER AND LESS BRITTLE . . . WILL NOT SPLIT . . . LESS CUTTING . . . UNIFORM IN GAUGE — all of these factors make CURITY Dermal and Tension Sutures superior to horsehair and silkworm gut. They give security to the suture line. They have established the merit of CURITY Dermal and Tension Sutures for skin and stay suturing.

A diversity of sizes and put-ups are offered. There are 190" strands which permit cutting of any desired length without waste; the 20", 40" and 60" lengths are desirable when a smaller amount is required. The finest (0000) Dermal is recommended for facial suturing . . . The medium and coarse grades offer greater strengths as well as satisfactory cosmetic results. Tension in gauges No. 1, No. 2 and No. 3 for retention sutures and obstetrical repair. Samples sent upon request.

LEWIS MANUFACTURING CO.
Division of THE KENDALL CO. *Walpole, Mass.*

Curity

DERMAL and TENSION SUTURES